43-20

ENGLISH BOTANY;

OR

COLOURED FIGURES

OF

BRITISH PLANTS,

WITH THEIR

ESSENTIAL CHARACTERS, SYNONYMS, AND PLACES OF GROWTH.

TO WHICH WILL BE ADDED,

OCCASIONAL REMARKS.

BY

JAMES EDWARD SMITH, M.D. F.R.S.

MEMBER OF THE IMP. ACAD. NATURÆ CURIOSORUM, THE ACADEMIES OF STOCKHOLM, UPSAL, TURIN, LISBON, LUND, BERLIN, PHILADELPHIA, AND THE NAT. HIST. SOCIETY OF PARIS;

PRESIDENT OF THE LINNÆAN SOCIETY.

THE FIGURES BY

JAMES SOWERBY, F.L.S.

———"VIRESQUE ACQUIRIT EUNDO."——— *Virg.*

VOL. XI.

LONDON:

PRINTED BY DAVIS, WILKS, AND TAYLOR, CHANCERY-LANE;

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MDCCC.

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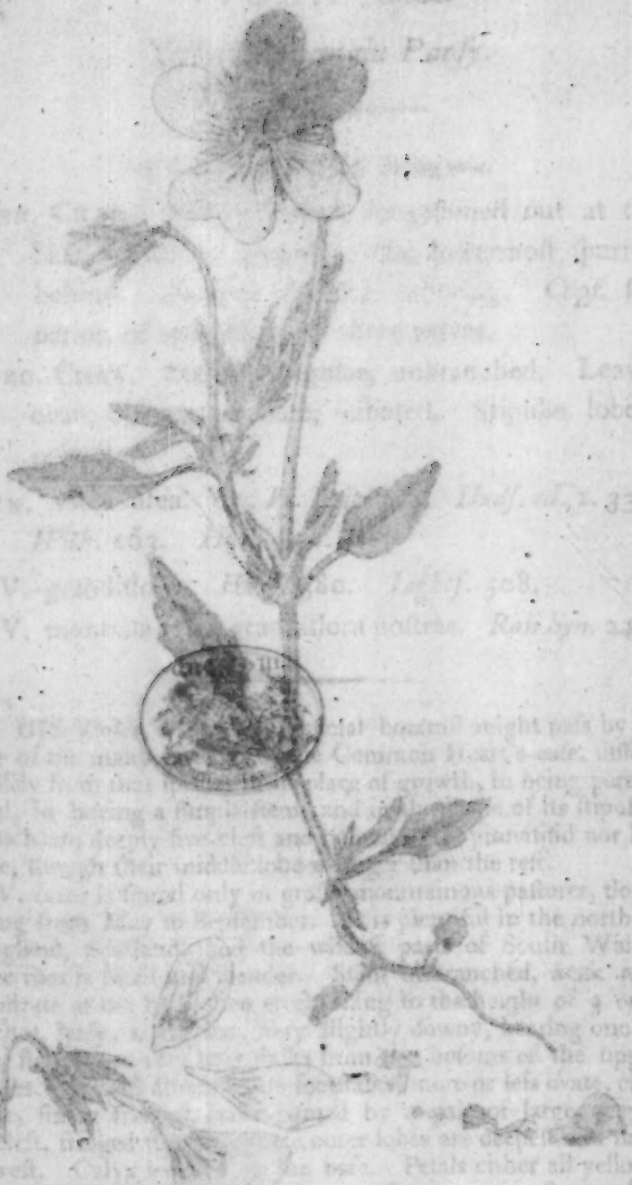
1800.



VIOLA lutea.

Yellow Mountain Panſy.

PENTANDRIA Monogynia.

GEN. CHAR. *Cal.* 5-leaved, lengthened out at the baſe. *Pet.* 5, irregular; the lowermoſt ſpurred behind. *Antheræ* ſlightly cohering. *Capſ.* ſuperior, of one cell, with three valves.

SPEC. CHAR. Stem triangular, unbranched. Leaves ovato-oblong, crenate, ciliated. Stipulæ lobed, palmate.

SYN. Viola lutea. *Sm. Fl. Brit.* 248. *Hudſ. ed.* 1. 331. *With.* 263. *Hull.* 192.

V. grandiflora. *Hudſ.* 380. *Lightf.* 508.

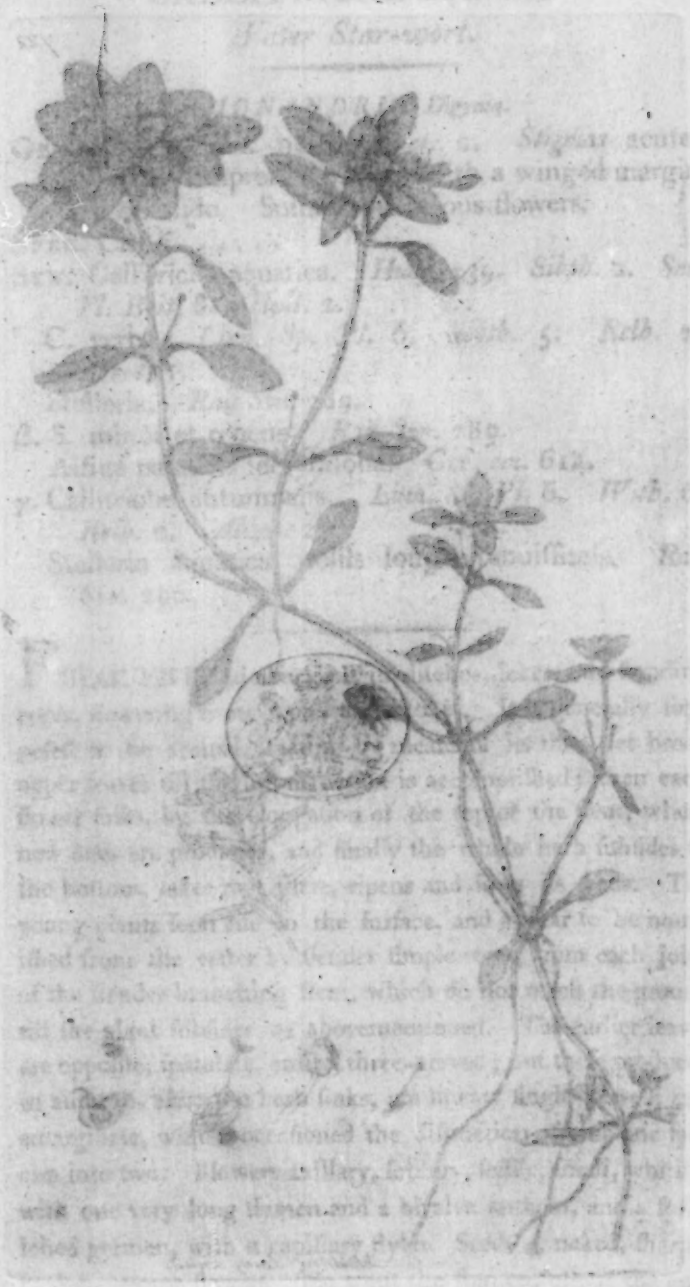
V. montana lutea grandiflora noſtras. *Raii Syn.* 249.

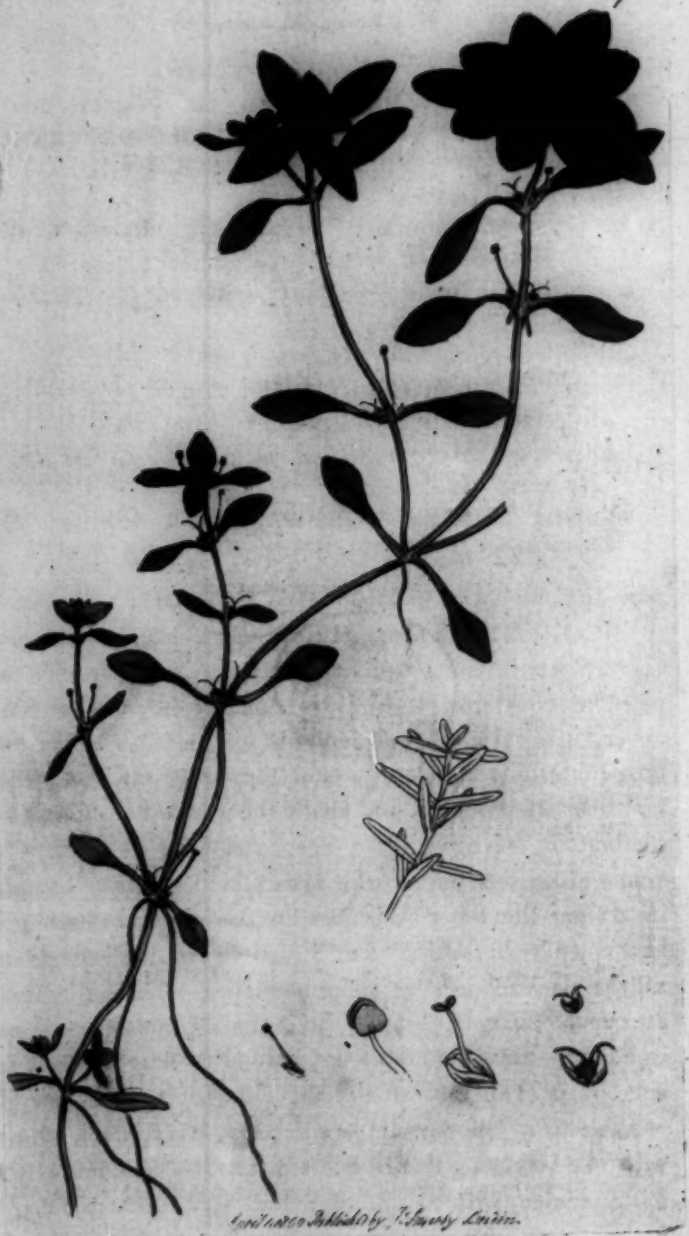
THIS Violet, which a ſuperficial botaniſt might paſs by as one of the many varieties of the Common Heart's-eaſe, differs widely from that ſpecies in its place of growth, in being perennial, in having a ſimple ſtem, and in the ſhape of its ſtipulæ, which are deeply five-cleft and palmate, not pinnatifid nor lyrate, though their middle lobe is larger than the reſt.

V. *lutea* is found only in graſſy mountainous paſtures, flowering from May to September. It is plentiful in the north of England, Scotland, and the wildeſt parts of South Wales. The root is ſmall and ſlender. Stem unbranched, weak and proſtrate at the baſe, then erect, riſing to the height of 3 or 4 inches, leafy, triangular, very ſlightly downy, bearing one or two flowers on very long ſtalks from the boſoms of the upper leaves. Leaves alternate, on footſtalks, more or leſs ovate, crenate, finely fringed, accompanied by a pair of large, deeply 5-cleft, fringed ſtipulæ, whoſe outer lobes are deepeſt and narroweſt. Calyx toothed at the baſe. Petals either all yellow, with dark-purple radiating veins, or the 2 uppermoſt are of a blue purple, the reſt yellow with a blue tinge; very often the whole are purple. The antheræ are ſlightly attached to each other. The ſingular form of the ſtyle and ſtigma is expreſſed in our figure greatly magnified; the purple line under the ſtigma is remarkable.

CALLITRICHE aquatica.

Water Star-wort.





Published by J. Sowerby, London.

CALLITRICHE aquatica.

Water Star-wort.

MONANDRIA Digynia.

GEN. CHAR. *Cal.* none. *Pet.* 2. *Stigmas* acute. *Seeds* 4, compreſſed, naked, with a winged margin on one ſide. Some monoecious flowers.

SPEC. CHAR. .....

SYN. Callitriche aquatica. *Hudſ.* 439. *Sibth.* 2. *Sm. Fl. Brit.* 8. *Hull.* 2.

C. verna. *Linn. Sp. Pl.* 6. *With.* 5. *Relh.* 2. *Abbot.* 1.

Stellaria. *Raii Syn.* 289.

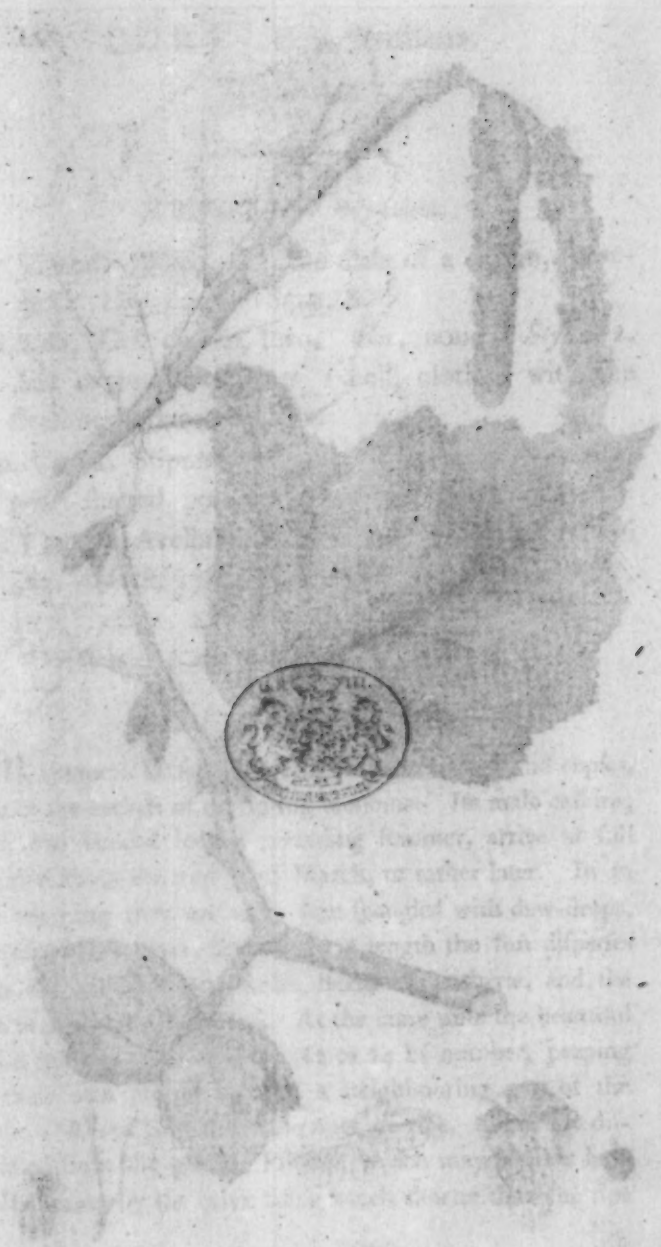
β. S. minor et repens. *Raii Syn.* 289.

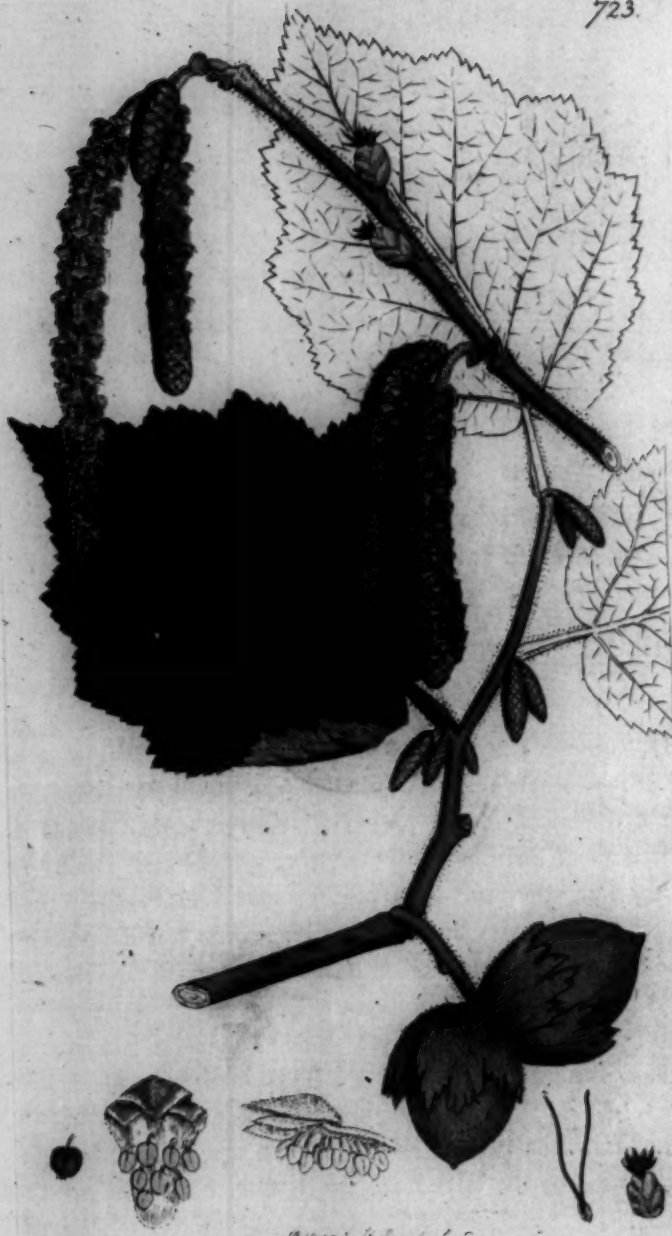
Alſine paluſtris ſerpyllifolia. *Ger. em.* 614.

γ. Callitriche autumnalis. *Linn. Sp. Pl.* 6. *With.* 6. *Relh.* 2. *Abbot.* 2.

Stellaria aquatica, foliis longis tenuiſſimis. *Raii Syn.* 290.

FREQUENT and abundant in ditches, lakes, and ſtanding pools, flowering from April to October. It is generally ſuppoſed to be annual, floating by means of its thick-ſet broad upper leaves till the impregnation is accompliſhed; then each flower ſinks, by the elongation of the top of the ſtem, where new ones are produced, and finally the whole herb ſubſides to the bottom, takes root there, ripens and ſows its ſeeds. The young plants ſoon riſe to the ſurface, and appear to be nouriſhed from the water by ſlender ſimple roots, from each joint of the ſlender branching ſtem, which do not reach the ground till the plant ſubſides as abovementioned. The earlier leaves are oppoſite, ſpatulate, entire, three-nerved; but thoſe produced in autumn, after the herb ſinks, are linear, ſingle-nerved, and emarginate, which occaſioned the diſtinction of this one ſpecies into two. Flowers axillary, ſolitary, ſeſſile, ſmall, whitiſh, with one very long ſtamen and a bivalve anthera, and a four-lobed germen, with 2 capillary ſtyles. Seeds 4, naked, ſharply keeled. Some flowers often want the ſtamen, others the germen and ſtyles; which led Mr. Hudſon to remove this genus to the *Polygamia*, a claſs which if thus rigidly attended to would ſwallow up half the reſt.





April 1.1800 Published by J.t Sowerby London.

CORYLUS Avellana.

Haſel-nut.

MONOECIA Polyandria.

GEN. CHAR. Male, *Cal.* the ſcale of a catkin, three-cleft. *Cor.* none. *Stam.* 8.

Female, *Cal.* cloven, torn. *Cor.* none. *Styles* 2. *Nut* ovate, ſmooth, of 1 cell, clothed with the ſwelling coriaceous calyx.

SPEC. CHAR. Stipulæ ovate, obtuſe. Leaves roundiſh, heart-ſhaped, pointed. Young branches hairy.

SYN. Corylus Avellana. *Linn. Sp. Pl.* 1417. *Hudſ.* 423. *With.* 378. *Hull.* 213. *Relh.* 364. *Sibth.* 127. *Abbot.* 211.

C. ſylveſtris. *Raii Syn.* 439.

THE common Haſel-nut, ſo frequent in hedges and copſes, is one of the earlieſt of our ſpring bloſſoms. Its male catkins, which had budded in the preceding ſummer, arrive at full perfection about the middle of March, or rather later. In an April morning they are often ſeen ſpangled with dew-drops, and quivering to every breeze, till at length the ſun diſperſes the moiſture, ſhrinks the ſcales, burſts the antheræ, and the pollen is plentifully ſcattered. At the ſame time the beautiful crimſon ſtyles may be obſerved, 12 or 14 in number, peeping from their own proper buds in a neighbouring part of the branches. About September the nuts are ripe. They are diſtinguiſhed from the garden Filberd, which may poſſibly be a diſtinct ſpecies, by the calyx being much ſhorter than the ripe nut.

The young branches are clothed with reddiſh hairs. Leaves produced after the flowers, downy, heart-ſhaped at the baſe, doubly ſerrated, veiny. The catkins fall off entire. The ſtamina are about 8 to every ſcale.

April 1st 1790 published by J.t Sowerby London.

RUMEX acutus.
Sharp Dock.

HEXANDRIA Trigynia.

GEN. CHAR. *Cal.* 3-leaved. *Petals* 3, cloſed. *Seed* 1, ſuperior, naked, triangular. *Stigmas* many-cleft.

SPEC. CHAR. Valves oblong, obſcurely toothed, each bearing a prominent grain. Leaves cordato-oblong, pointed. Cluſters leafy.

SYN. Rumex acutus. *Linn. Sp. Pl.* 478. *Sm. Fl. Brit.* 391. *Hudſ.* 155. *Relh.* 147.

R. paludoſus. *With.* 354, by the deſcript. *Hull.* 77.

Lapathum acutum. *Raii. Syn.* 142.

β. L. acutum minimum. *Dill. in Raii Syn.* 141.

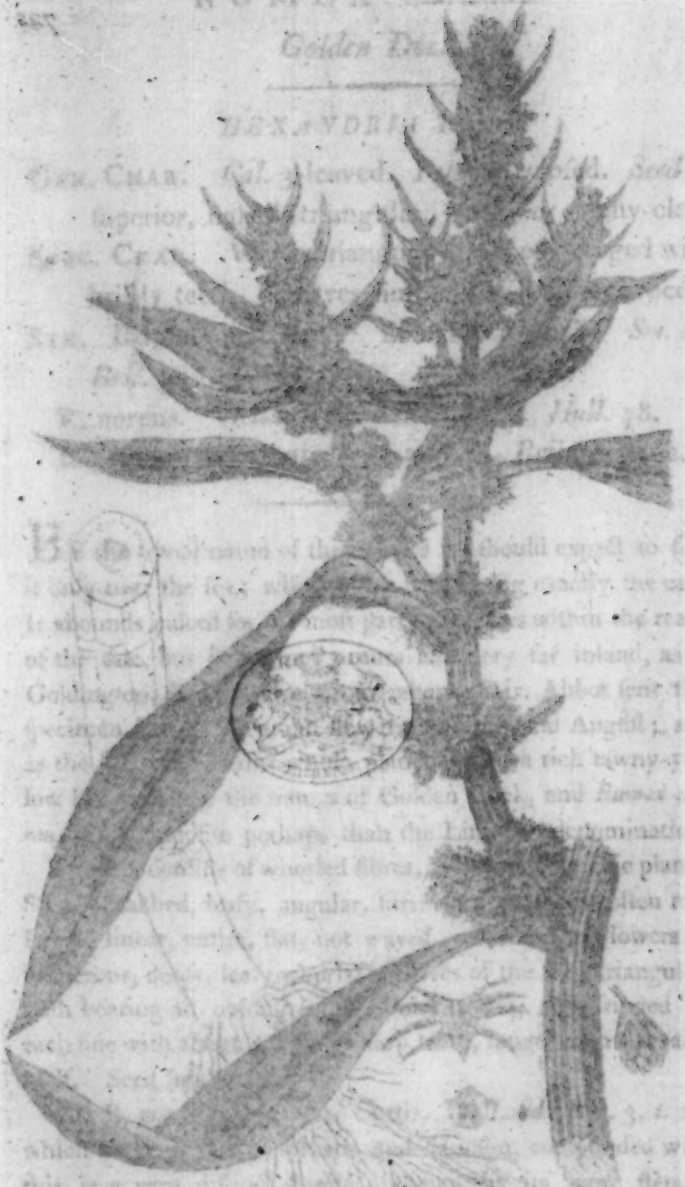
THIS *Rumex* has been enveloped in ſuch confuſion, I ſhould hardly venture, without the moſt certain documents, to undertake its illuſtration. It is the *acutus* of the Linnæan herbarium, and agrees with the character in *Sp. Pl.* From Ray's exeellent though ſhort deſcription there can be no doubt of its being his *Lapathum acutum.* It does not agree with Mr. Hudſon's deſcription of his *paludoſus*, (a plant I do not pretend to know,) but I rather believe he confounded ours with the common *Lap. viride* of Dillenius under his *R. acutus*, and Mr. Curtis ſeems to have done the ſame. His figure agrees with our plant, but his letter-preſs rather with *L. viride*, which is truly a variety of *R. ſanguineus*, only one of its valves having a prominent grain. I have therefore perhaps too incautiouſly quoted the figure of Curtis for *R. ſanguineus* β in the *Fl. Brit.*

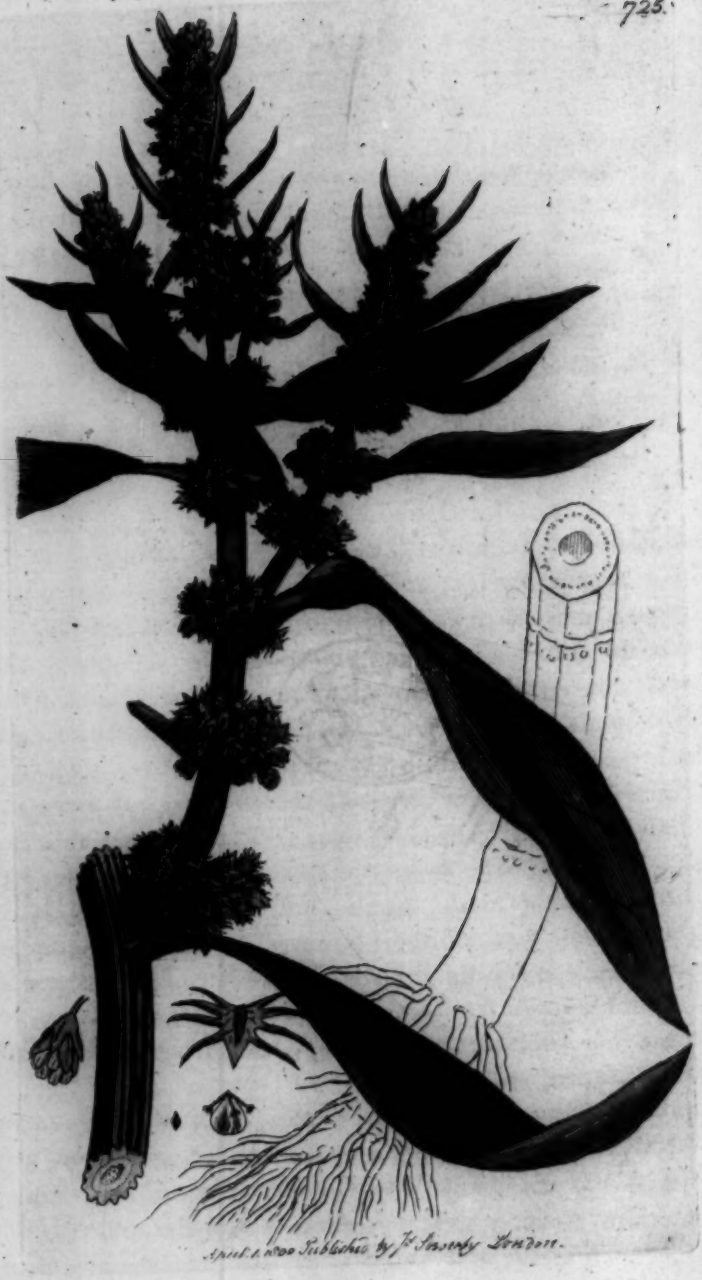
Our genuine *R. acutus* ſeems not uncommon in marſhy meadows. This ſpecimen grew at Surlingham, below Norwich, flowering in July. Root perennial. Stem angular, furrowed, ſmooth, rather zigzag. Leaves narrow. Branches elongated, bearing numerous drooping flowers, almoſt always accompanied by ſmall ſtalked leaves. Seed ſmall, encloſed in valves, formed of the petals, which are oblong, entire, rarely toothed at the baſe, each conſtantly bearing a large red prominent grain. The flowers are male, female, and hermaphrodite, ſome of the males having, according to Mr. Sowerby, 12 ſtamina.

RUMEX.

Golden Dock.

HEXANDRIA





April 1. 1800 Published by J. Stanway London.

RUMEX maritimus.

Golden Dock.

HEXANDRIA Trigynia.

GEN. CHAR. *Cal.* 3-leaved. *Petals* 3, cloſed. *Seed* 1, ſuperior, naked, triangular. *Stigmas* many-cleft.

SPEC. CHAR. Valves triangular, grained, fringed with briſtly teeth. Leaves linear. Whorls crowded.

SYN. Rumex maritimus. *Linn. Sp. Pl.* 478. *Sm. Fl. Brit.* 393. *Hudſ.* 155.

R. aureus. *With.* 356. *Abbot.* 81. *Hull.* 78.

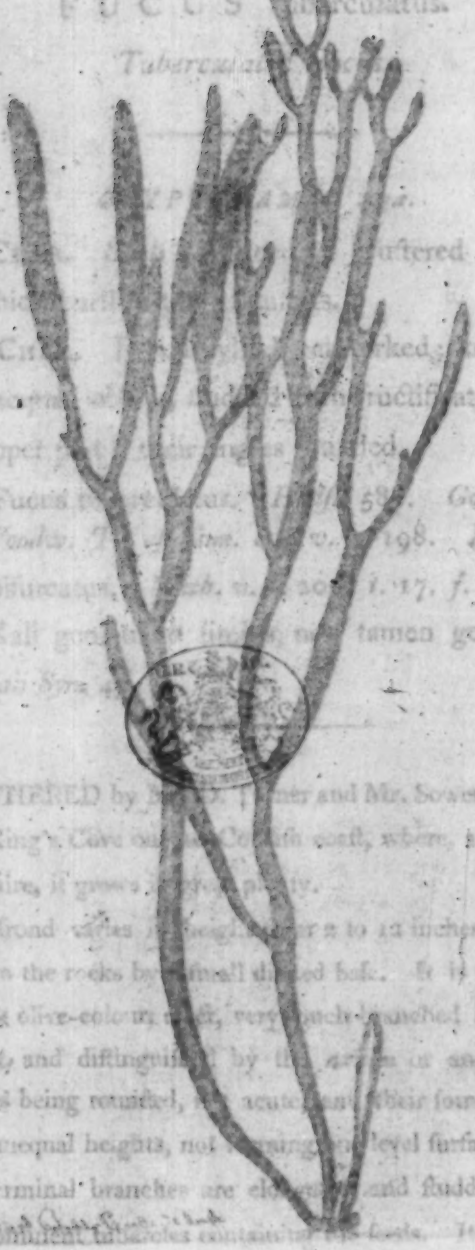
Lapathum folio acuto, flore aureo. *Raii Syn.* 142.

BY the trivial name of this ſpecies we ſhould expect to find it only near the ſea; which is far from being exactly the caſe. It abounds indeed for the moſt part in marſhes within the reach of the tide, but ſometimes occurs alſo very far inland, as at Goldington, Bedfordſhire, from whence Mr. Abbot ſent this ſpecimen. It is perennial, flowering in July and Auguſt; and as the ſeeds ripen, the whole plant aſſumes a rich tawny-yellow hue, whence the names of Golden Dock, and *Rumex aureus*, more appoſite perhaps than the Linnæan denomination.

The root conſiſts of whorled fibres, as in many aquatic plants. Stem branched, leafy, angular, furrowed, roughiſh, often red. Leaves linear, entire, flat, not waved. Cluſters of flowers of numerous, denſe, leafy whorls. Valves of the fruit triangular, each bearing an oblong (not globular) grain, and fringed on each ſide with about 4 narrow ſharp teeth, longer than the valve itſelf. Seed ſmall.

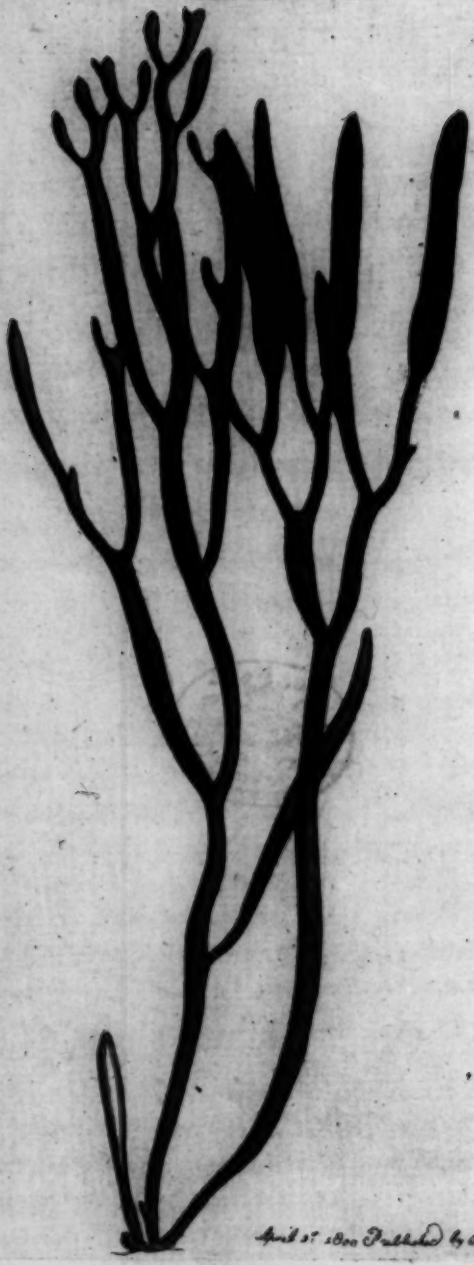
The R. *maritimus* of Mr. Curtis, *Fl. Lond. faſc.* 3. *t.* 23, which he, as well as Linnæus and Hudſon, confounded with this, is a very diſtinct ſpecies, known by its more ſlender growth, diſtant whorls, leſs golden hue, and eſpecially by the ſhortneſs of the teeth of its valves. This is not at all a maritime plant. It is deſcribed in *Fl. Brit.* by the name of *paluſtris*.

FUCUS tuberculatus.



GATHERED by [illegible] and Mr. Sowerby in June last in King's Cove on the Devonshire coast, where, as well as in Devonshire, it grows [illegible] plentifully.

The frond varies in length from 2 to 12 inches, and is attached to the rocks by a small discoid base. It is cylindrical, of a dark olive-colour, soft, very much branched in the upper part, and distinguished by the acute angles or angles of the branches being rounded, the acute angles of their forkings blunt, and of unequal heights, not arising from a level surface. Many of the terminal branches are elongated and studded all over with prominent tubercles containing [illegible] seeds. It turns quite black in drying, like most of the olive-coloured *Fuci*.



April 1st 1804 Published by G. Nicol.

FUCUS tuberculatus.

Tuberculated Fucus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in cluſtered tubercles, which burſt at their ſummits.

SPEC. CHAR. Frond cylindrical, forked; its branches unequal, obtuſe, ſtudded with fructification in the upper part; their angles rounded.

SYN. Fucus tuberculatus. *Hudſ.* 588. *Gooden. and Woodw. Tr. of Linn. Soc. v.* 3. 198. *Hull.* 325.

F. bifurcatus. *With. v.* 4. 209. *t.* 17. *f.* 1.

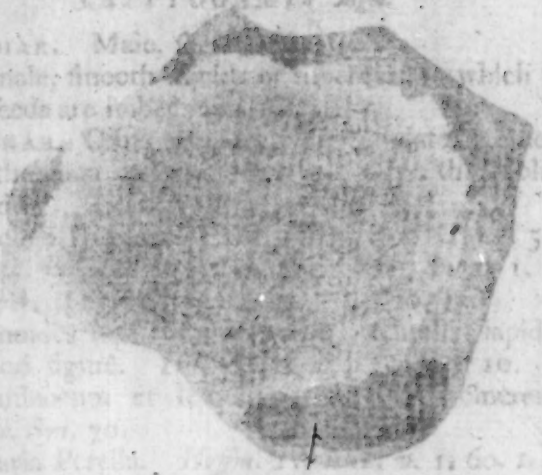
F. Kali geniculato ſimilis, non tamen geniculatus. *Raii Syn.* 43.

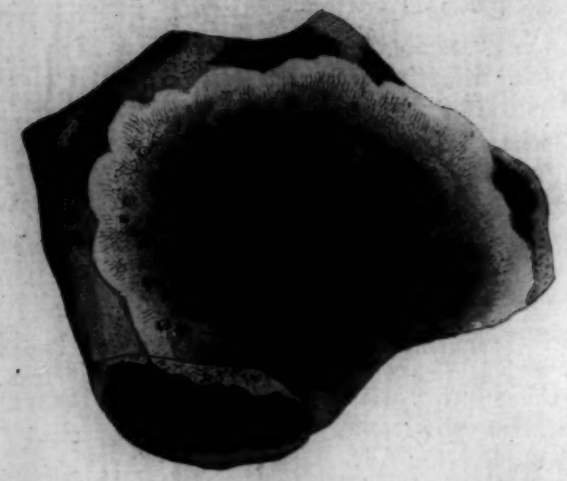
GATHERED by Mr. D. Turner and Mr. Sowerby in June laſt in King's Cove on the Corniſh coaſt, where, as well as in Devonſhire, it grows in great plenty.

The frond varies in height from 2 to 12 inches, and is attached to the rocks by a ſmall dilated baſe. It is cylindrical, of a dark olive-colour, erect, very much branched in the upper part, and diſtinguiſhed by the *axillæ* or angles of the branches being rounded, not acute, and their ſummits blunt, and of unequal heights, not forming one level ſurface. Many of the terminal branches are elongated, and ſtudded all over with prominent tubercles containing the ſeeds. It turns quite black in drying, like moſt of the olive-coloured *Fuci*.

LICHEN Cocellus.

Crab's-eye Lichen.





London, published by Cha.s Taylor, May 1.st 1821

LICHEN Perellus.

Crab's-eye Lichen.

CRYPTOGAMIA Algæ.

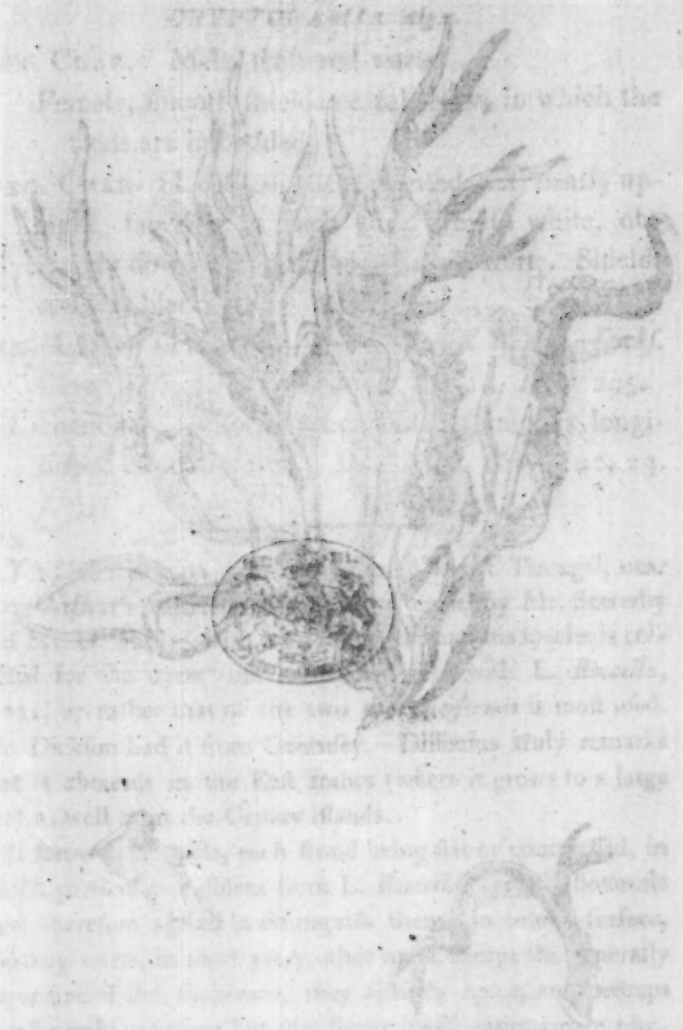
GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

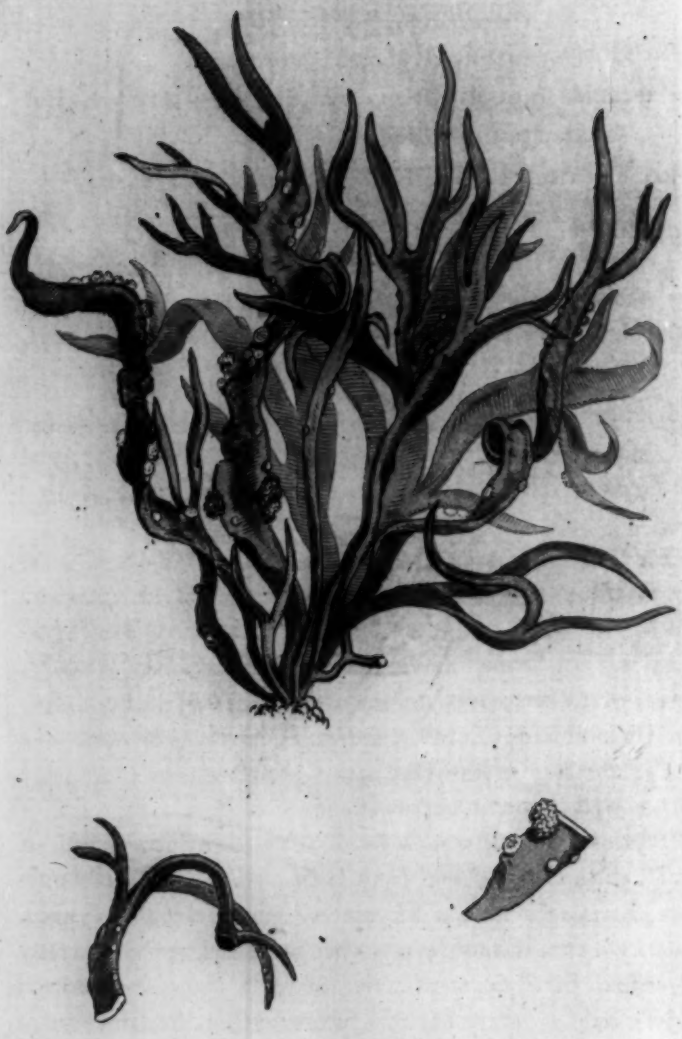
SPEC. CHAR. Cruſtaceous, white, granulated. Shields of the ſame colour, concave, with a thick blunt border.

SYN. Lichen Parellus. *Linn. Mant.* 132. *Hudſ.* 530. *With. v.* 4. 17. *Hull.* 288. *Relh. Suppl.* 1. 23. *Abbot.* 262. *Dickſ. H. Sicc. faſc.* 10. 23.
Lichenoides leproſum tinctorium, ſcutellis lapidum cancri figurâ. *Dill. Muſc.* 130. *t.* 18. *f.* 10.
L. cruſtaceum et leproſum, ſcutellare, cinereum. *Raii. Syn.* 70.
Patellaria Perella. *Hoffm. Pl. Lich. v.* 1. 60. *t.* 12. *f.* 5.

FOUND on expoſed rocks and ſtones in mountainous countries, ſometimes on walls, ſometimes on ſtones by the ſea ſhore. It forms white very conſpicuous round patches, cloſely adhering to the ſtone, but eaſily ſcraped off, various in thickneſs, with a granulated, not powdery, ſurface, and a thin rugged very white ſpreading border. Shields copious, ſeſſile, but prominent, of the ſame colour as the cruſt, rather concave, with a thick elevated ſmoothiſh margin. Occaſionally their diſk becomes convex and warty.

This is the French *Orſeille* or Orchall, uſed for dyeing in that country as L. *tartareus*, ſee our *t.* 156, is in Scotland, and prepared with volatile alkali in a ſimilar manner, of which a full account is given by Profeſſor Hoffmann from a French work of M. Amoreux of Montpellier, publiſhed in 1787 by the Academy of Lyons. The plant is more common in the ſouth of France than with us, and is called Perelle d'Auvergne, for ſo M. Amoreux directs us to ſpell it, not *Parelle*, which laſt name belongs to ſome ſpecies of *Rumex*. Tournefort in his Voyage mentions it by this name when he deſcribes the L. *Roccella* at the iſland of Amorgos. The colour furniſhed by L. *Perellus* has rather more of a violet hue than that of L. *tartareus*, but each is capable of being ſo modified as to give any tinge of purple or crimſon.





Sept. 1.1809. Published by J.F. Dove, London.

LICHEN fuciformis.

Flat-leaved Orchal.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

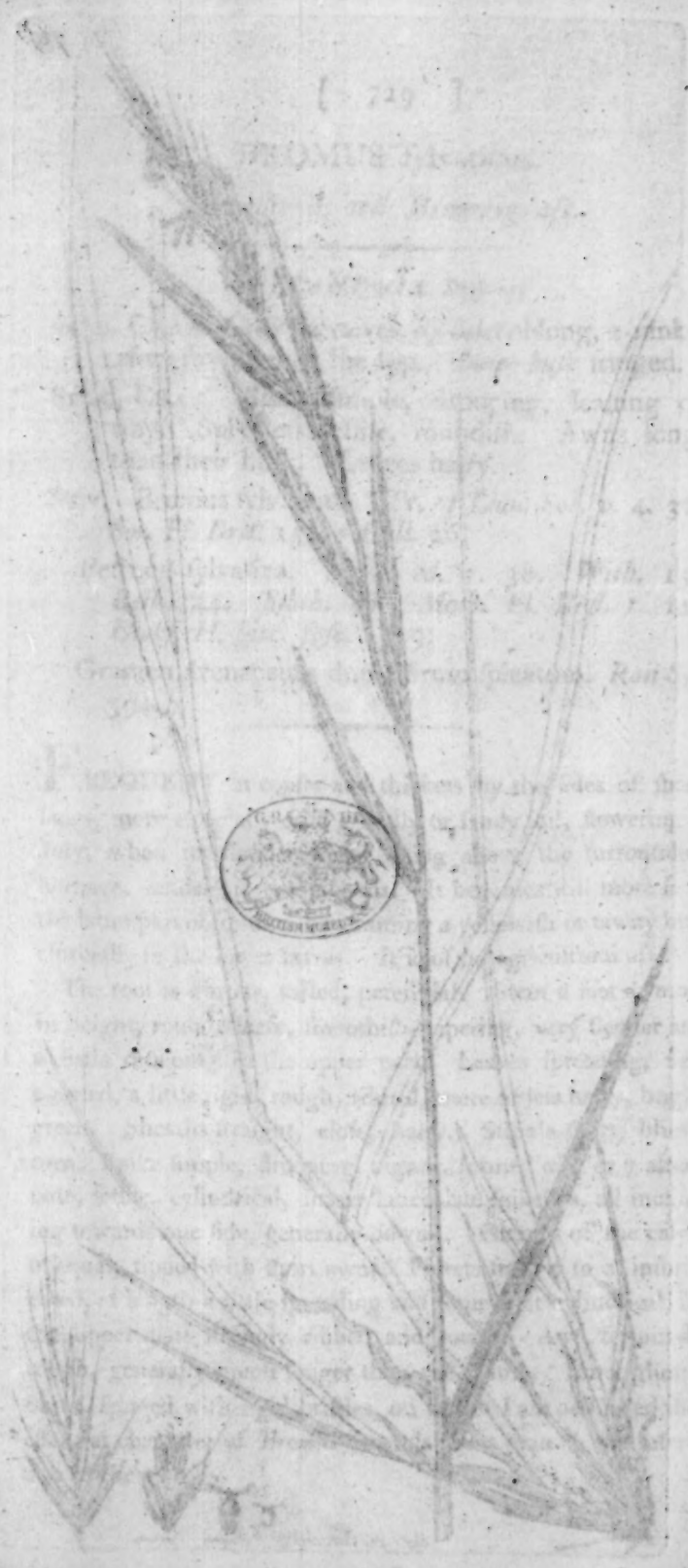
SPEC. CHAR. Leafy, divided, pointed, flat, nearly upright, tapering at each end, greyiſh white, obſcurely downy, ſet with white mealy warts. Shields convex, blackiſh.

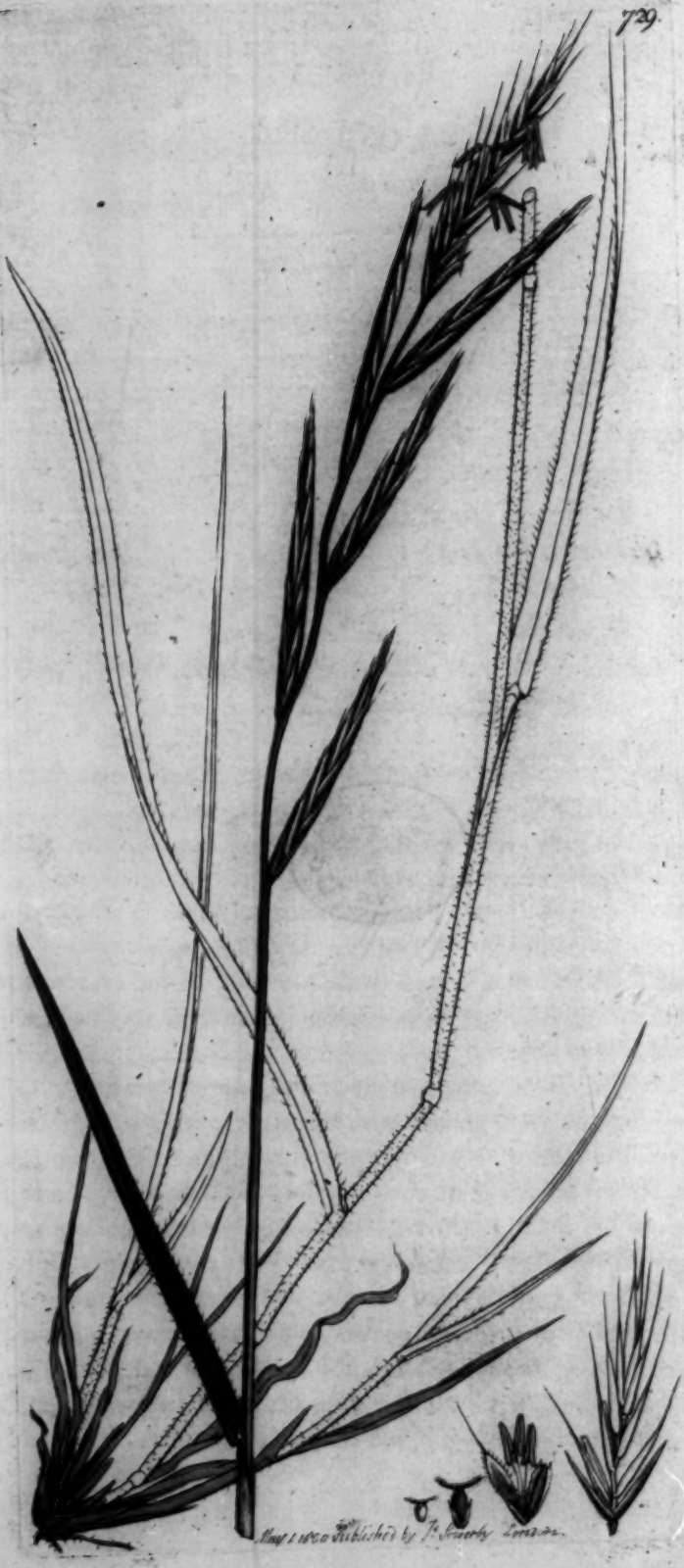
SYN. Lichen fuciformis. *Linn. Sp. Pl.* 1614. *Dickſ. Crypt. faſc.* 3. 17. *With. v.* 4. 51. *Hull.* 295.

Lichenoides fuciforme tinctorium, corniculis longioribus et acutioribus. *Dill. Muſc.* 168. *t.* 22, 23. *f.* 61.

GATHERED on coarſe granite rocks at Tintagel, near King Arthur's caſtle on the Corniſh coaſt, by Mr. Sowerby and Mr. D. Turner, who were informed that this ſpecies is collected for the dyers' uſe indiſcriminately with L. *Roccella*, *t.* 211, or rather that of the two the *fuciformis* is moſt uſed. Mr. Dickſon had it from Guernſey. Dillenius truly remarks that it abounds in the Eaſt Indies (where it grows to a large ſize) as well as in the Canary iſlands.

It forms denſe tufts, each frond being flat or compreſſed, in which particular it differs from L. *Roccella*, and all botaniſts have therefore agreed to diſtinguiſh them; in colour, ſurface, powdery warts, in ſhort every other mark except the generally larger ſize of the *fuciformis*, they entirely agree, and perhaps may be only varieties; but that future inveſtigations upon phyſiological principles muſt decide. Some ſmall cylindrical branches now and then occur in the preſent plant. Beſides the powdery warts, we have in one ſpecimen diſcovered a blackiſh prominent tubercle; Dillenius deſcribes the tubercles on his ſpecimens *t.* 23 as aſh-coloured.




May 1 1802 Published by J. Sowerby London

BROMUS ſylvaticus.

Slender Wood Brome-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves. *Spikelet* oblong, 2-ranked. *Awn* from below the top. *Inner huſk* fringed.

SPEC. CHAR. Spike ſimple, drooping, leaning one way. Spikelets ſeſſile, roundiſh. Awns longer than their huſk. Leaves hairy.

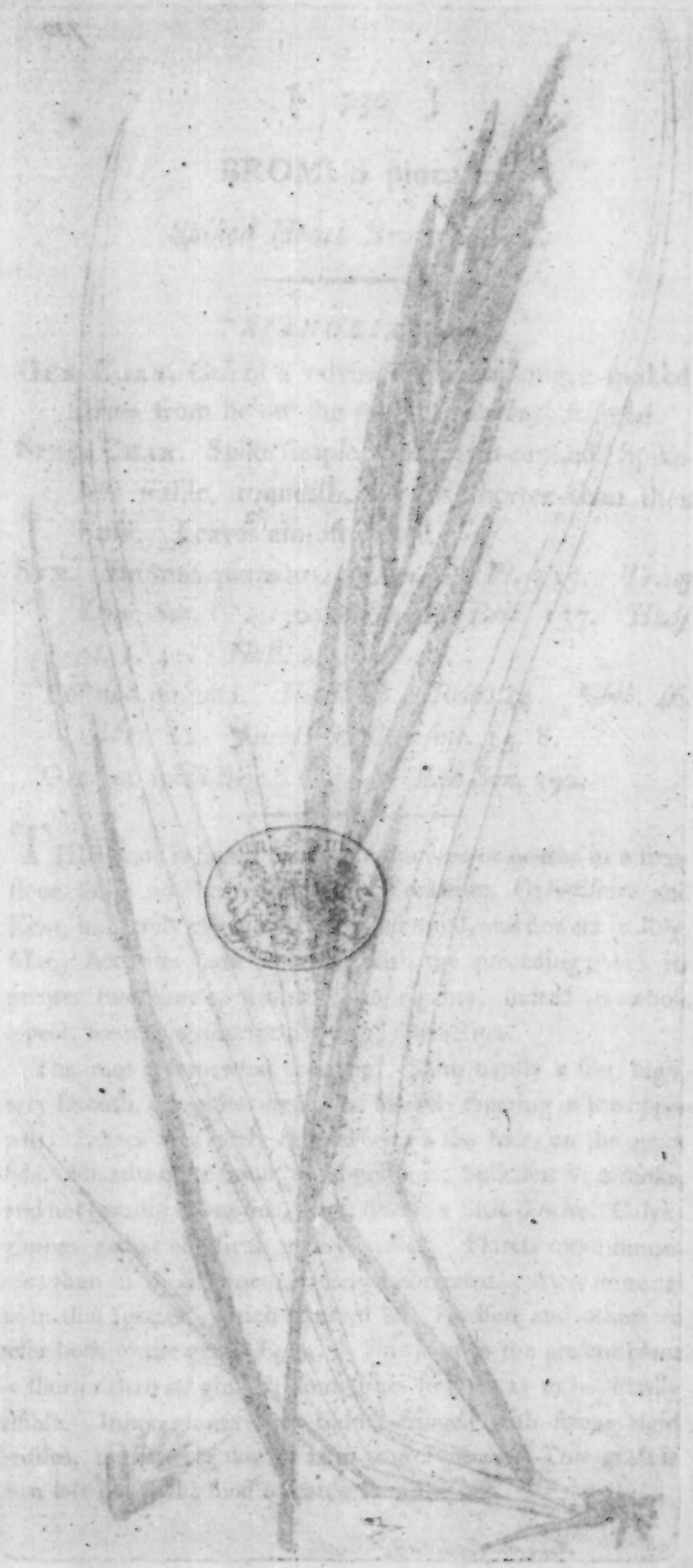
SYN. Bromus ſylvaticus. *Tr. of Linn. Soc. v.* 4. 300. *Sm. Fl. Brit.* 136. *Hull.* 26.

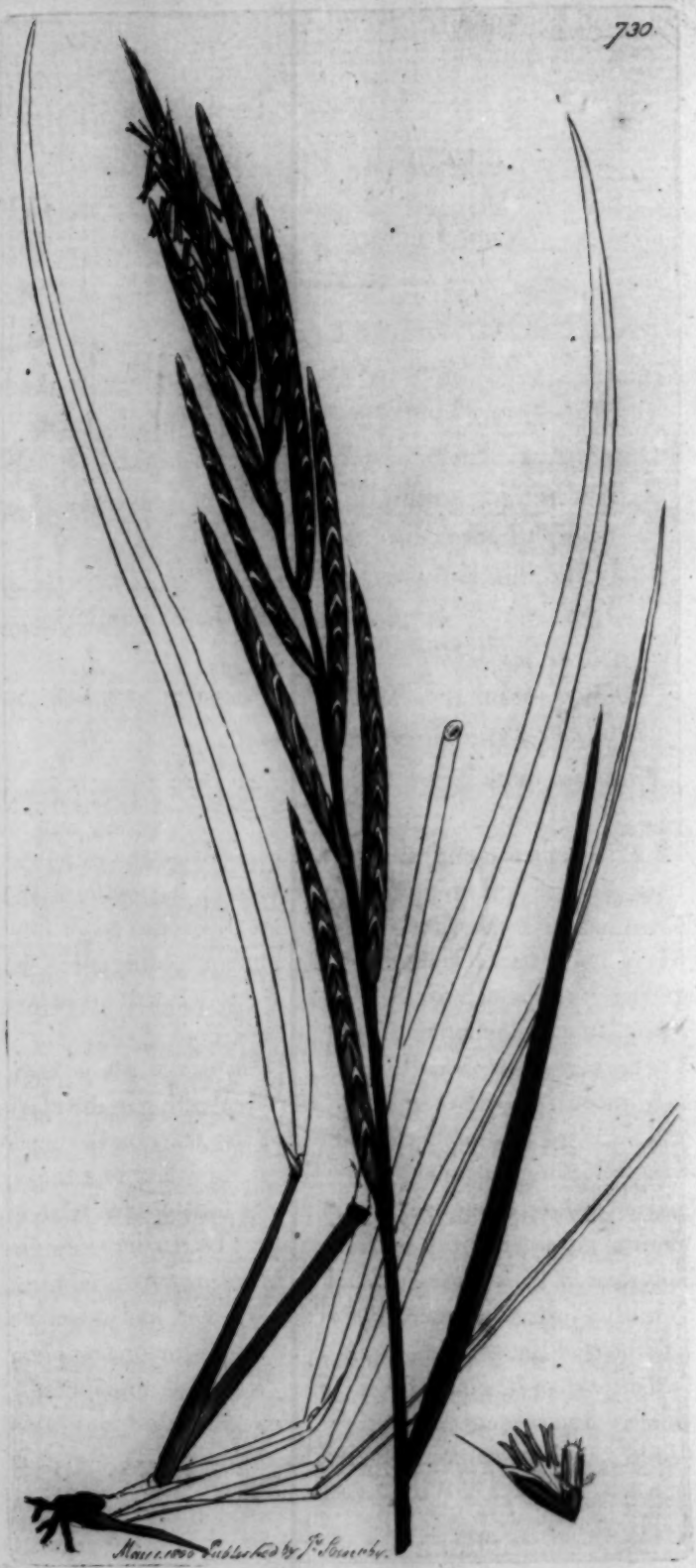
Feſtuca ſylvatica. *Hudſ. ed.* 1. 38. *With.* 158. *Relh.* 44. *Sibth.* 46. *Mart. Fl. Ruſt. t.* 114. *Dickſ. H. Sicc. faſc.* 13. 9.

Gramen avenaceum dumetorum ſpicatum. *Raii Syn.* 394.

FREQUENT in copſes and thickets by the ſides of ſhady lanes, more eſpecially on a gravelly or ſandy ſoil, flowering in July, when its ſlender form, riſing above the ſurrounding herbage, renders it conſpicuous. It becomes ſtill more ſo in the latter part of ſummer by aſſuming a yellowiſh or tawny hue, eſpecially in the lower leaves. It is of no agricultural uſe.

The root is fibrous, tufted, perennial. Stem 2 feet or more in height, round, leafy, ſmoothiſh, tapering, very ſlender and a little drooping in the upper part. Leaves ſpreading, flat, pointed, a little rigid, rough, ribbed, more or leſs hairy, bright green. Sheaths ſtraight, cloſe, hairy. Stipula ſhort, blunt, torn. Spike ſimple, drooping, zigzag, formed of 6 or 7 alternate, ſeſſile, cylindrical, linear-lanceolate ſpikelets, all inclining towards one ſide, generally downy. Glumes of the calyx unequal, tipped with ſhort awns. Florets from 6 to 9, imbricated, at length a little ſpreading and ſomewhat cylindrical, in the upper part ſtrongly ribbed and rough. Awn terminal, rough, generally much longer than the glume. Inner glume blunt, fringed with rigid briſtles, on which I am perſuaded the eſſential character of *Bromus* depends more than on the inſertion of the awn.





Maund & Co. Published by Jr. Simmonds.

BROMUS pinnatus.

Spiked Heath Brome-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves. *Spikelet* oblong, 2-ranked. *Awn* from below the top. *Inner huſk* fringed.

SPEC. CHAR. Spike ſimple, erect, two-ranked. Spikelets ſeſſile, roundiſh. Awns ſhorter than their huſk. Leaves almoſt naked.

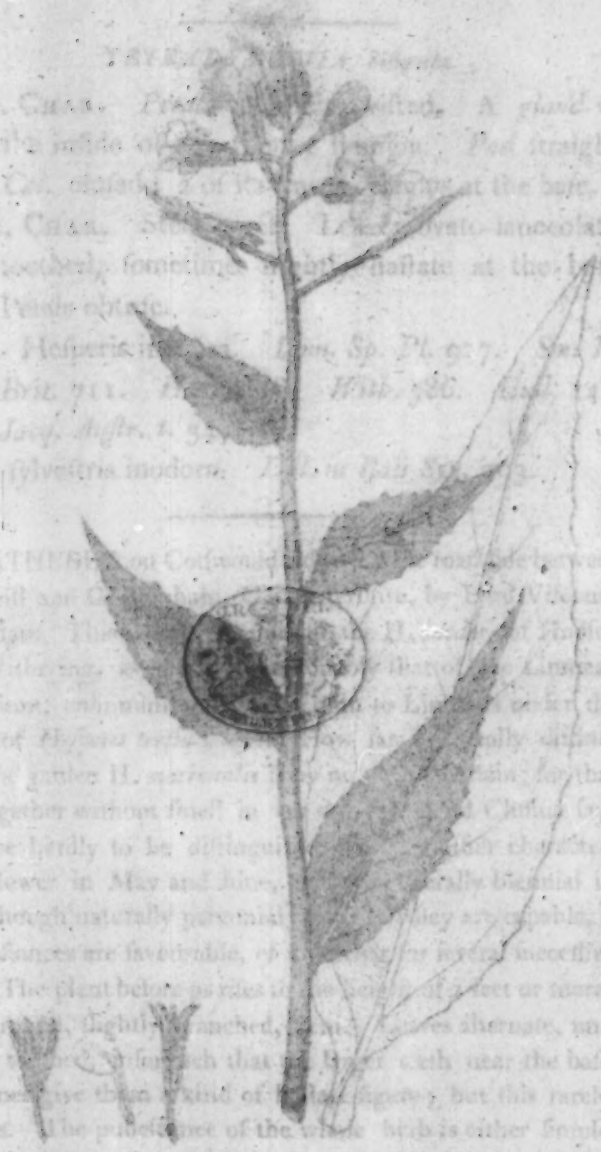
SYN. Bromus pinnatus. *Linn. Sp. Pl.* 115. *Tr. of Linn. Soc. v.* 4. 301. *Sm. Fl. Brit.* 137. *Hudſ. ed.* 1. 41. *Hull.* 26.

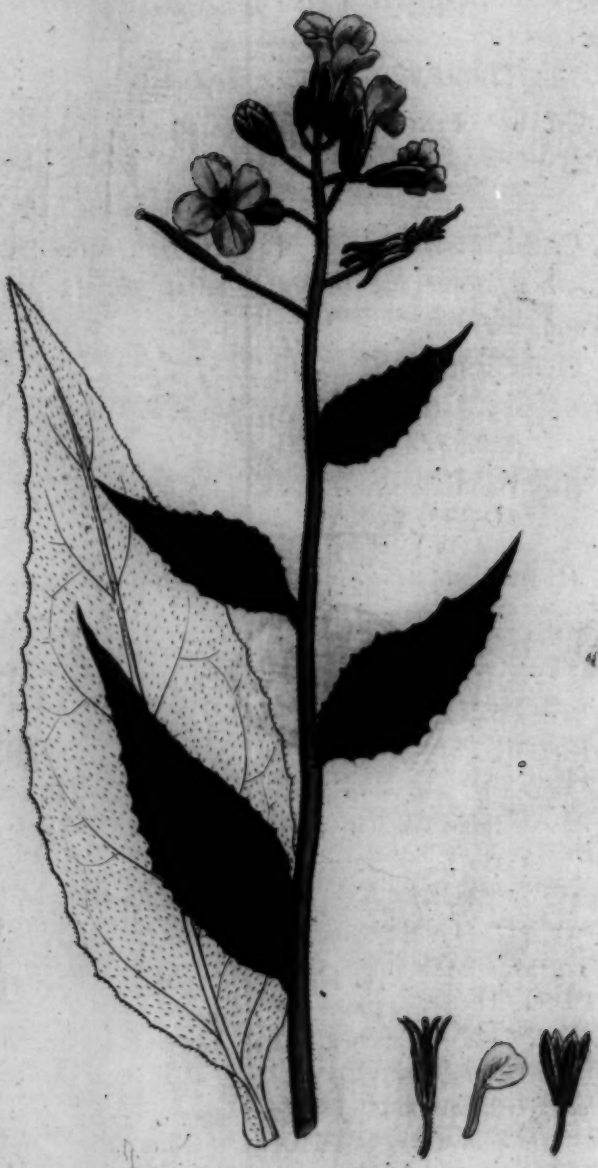
Feſtuca pinnata. *Hudſ.* 48. *Relh.* 44. *Sibth.* 46. *Abbot.* 22. *Dickſ. H. Sicc. faſc.* 13. 8.

Gramen ſpicâ Brizæ majus. *Raii Syn.* 392.

THIS graſs is found on open commons or heaths in a free-ſtone ſoil; not unfrequently in Yorkſhire, Oxfordſhire and Kent, but rarely elſewhere. It is perennial, and flowers in July. Many botaniſts have united it with the preceding; but its greater ſmoothneſs, firmneſs and rigidity, indeed its whole aſpect, ſeem to authorize a ſpecific diſtinction.

The root is ſomewhat creeping. Stem hardly 2 feet high, very ſmooth, altogether erect, and ſcarcely tapering in the upper part. Leaves very rarely clothed with a few hairs on the upper ſide. Sheaths quite ſmooth and poliſhed. Spikelets in 2 ranks, and not leaning to one ſide, long, linear, a little downy. Calyx-glumes rather elliptical, many-nerved. Florets more numerous than in B. *ſylvaticus*, cloſely imbricated. Awn terminal as in that ſpecies, which induced Mr. Hudſon and others to refer both to the genus *Feſtuca*. This awn in the preſent plant is ſhorter than its glume; ſometimes ſo ſhort as to be hardly viſible. Inner glume very blunt, fringed with ſtrong rigid briſtles, not merely downy as in true *Feſtucæ*.—This graſs is even leſs fit for the food of cattle than the laſt.





May 1.1800 Published by J.Sowerby London.

HESPERIS inodora.

Scentleſs Dame's-violet.

TETRADYNAMIA Siliquoſa.

GEN. CHAR. *Petals* obliquely twiſted. A *gland* on the inſide of the ſhorter ſtamina. *Pod* ſtraight. *Cal.* cloſed; 2 of its leaves gibbous at the baſe.

SPEC. CHAR. Stem erect. Leaves ovato-lanceolate, toothed, ſometimes ſlightly haſtate at the baſe. Petals obtuſe.

SYN. Heſperis inodora. *Linn. Sp. Pl.* 927. *Sm. Fl. Brit.* 711. *Hudſ.* 288. *With.* 586. *Hull.* 147. *Jacq. Auſtr. t.* 347.

H. ſylveſtris inodora. *Dill. in Raii Syn.* 293.

GATHERED on Cotſwould ridge, by the road ſide between Frogmill and Cheltenham, Glouceſterſhire, by Lord Viſcount Lewiſham. This ſhould therefore be the H. *inodora* of Hudſon and Withering, as it is unqueſtionably that of the Linnæan herbarium, communicated by Jacquin to Linnæus under the name of *Heſperis tertia Cluſii.* How far it is really diſtinct from the garden H. *matronalis* is by no means certain; for that is altogether without ſmell in the day-time, and Cluſius ſays they are hardly to be diſtinguiſhed by any other character. Both flower in May and June, and are generally biennial in fact, though naturally perennial; that is, they are capable, if circumſtances are favourable, of flowering for ſeveral ſucceſſive years. The plant before us riſes to the height of 2 feet or more, with a round, ſlightly-branched, ſtem. Leaves alternate, unequally toothed, inſomuch that the larger teeth near the baſe ſometimes give them a kind of haſtate figure; but this rarely happens. The pubeſcence of the whole herb is either ſimple or forked. Flowers pale roſe-coloured. Calyx-leaves cohering by their upper part. Stigma arrow-ſhaped, at leaſt as the pod increaſes; but this circumſtance is not proper to the whole genus.

D, d.

May 1 1802 Published by J. Sowerby Lond.

SUBULARIA aquatica.

Awl-wort.

TETRADYNAMIA Siliculoſa.

GEN. CHAR. *Pouch* entire, elliptical: *valves* elliptical, concave, contrary to the partition. *Style* ſhorter than the pouch.

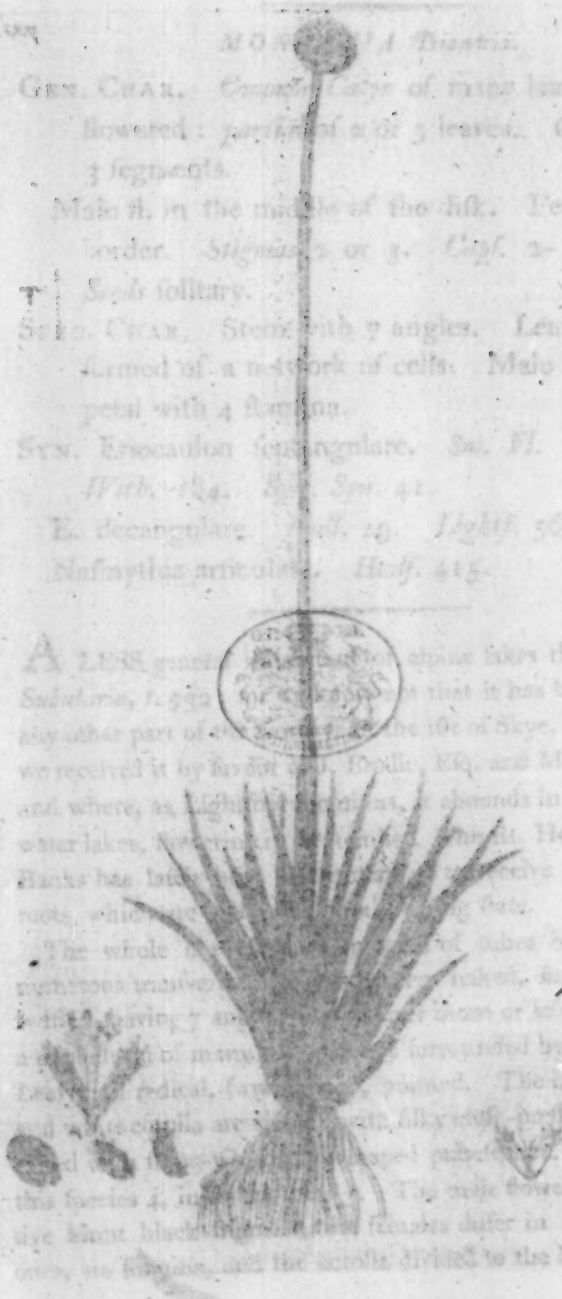
SPEC. CHAR . . . . .

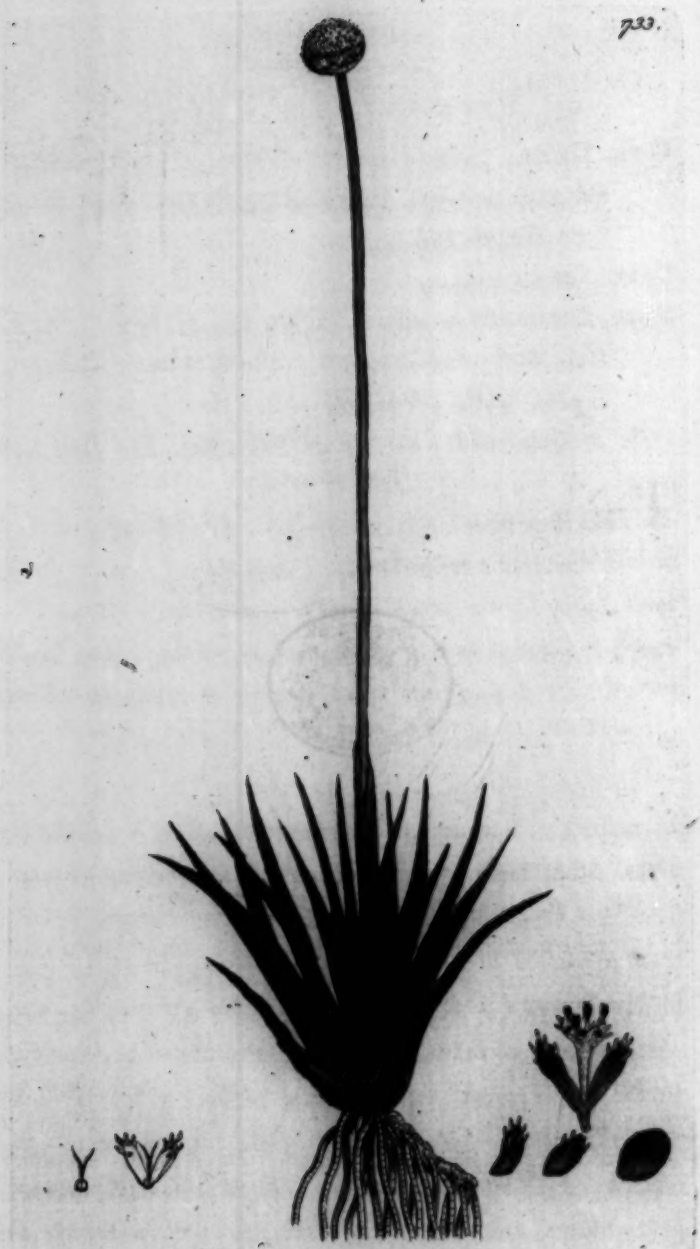
SYN. Subularia aquatica. *Linn. Sp. Pl.* 896. *Sm. Fl. Brit.* 676. *Hudſ.* 277. *With.* 564. *Hull.* 143. *Lightf.* 337. *Dickſ. H. Sicc. faſc.* 5. 9.

S. erecta, junci foliis acutis mollibus. *Raii Syn.* 307.

THIS little plant, however unoſtentatious in appearance, is no leſs remarkable for its ſituation, and mode of flowering under water, than for the peculiarity of its generic character. Sherard firſt found it in the gravelly bottom of an alpine lake in Ireland. Our ſpecimen was gathered in Scotland by Mr. Mackay. It flowers in July, and laſts but one year.

The root conſiſts of many long ſimple white fibres. Leaves all radical, awl-ſhaped (whence the name), with a recurved point. Stalk ſeldom more than 2 inches high, ſimple, ſmooth, bearing a ſimple ſpike of ſmall white flowers, always immerſed in the water, and ſo cloſed that the impregnation is accompliſhed in ſafety under the protection of the calyx and petals; otherwiſe the pollen would be ſpoiled before it could perform its office. By the firſt appearance of the flower and ſeed-veſſel one would readily take it for a *Draba*, ſee *t.* 586; but on examination an eſſential difference is found in the partition being contrary to the valves, not parallel with them, and yet thoſe valves are not keeled as in *Lepidium*, only concave; neither is the pouch notched as in that genus.





May 1. Published by Geo. Nicholson, London.

ERIOCAULON ſeptangulare.

Jointed Pipewort.

MONOECIA Triandria.

GEN. CHAR. *Common Calyx* of many leaves, many-flowered: *partial* of 2 or 3 leaves. *Cor.* in 2 or 3 ſegments.

Male fl. in the middle of the diſk. Female in the border. *Stigmas* 2 or 3. *Capſ.* 2- or 3-lobed. *Seeds* ſolitary.

SPEC. CHAR. Stem with 7 angles. Leaves pointed, formed of a network of cells. Male florets of 1 petal with 4 ſtamina.

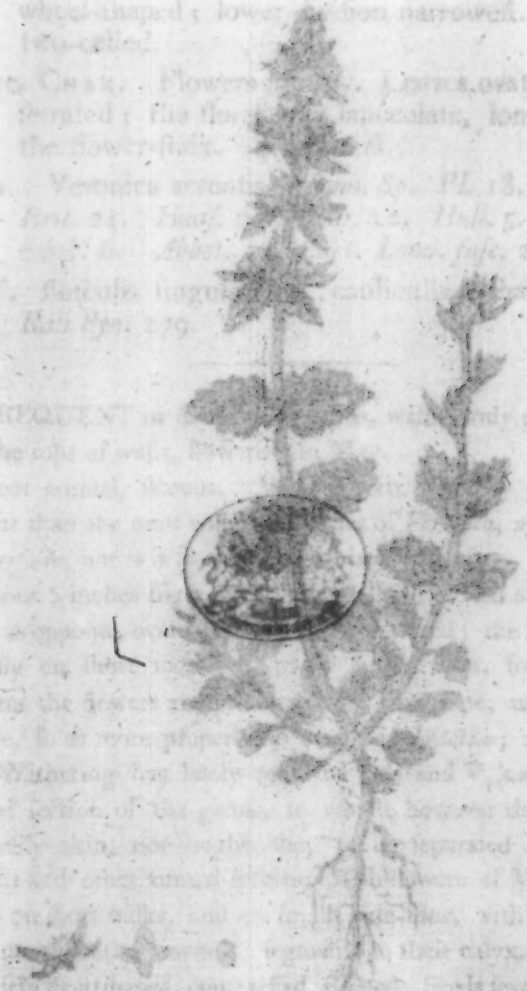
SYN. Eriocaulon ſeptangulare. *Sm. Fl. Brit.* 1010. *With.* 184. *Sym. Syn.* 41.

E. decangulare. *Hull.* 29. *Lightf.* 569.

Naſmythia articulata. *Hudſ.* 415.

A LESS general inhabitant of alpine lakes than even the *Subularia*, *t.* 732; for we know not that it has been found in any other part of the world than the iſle of Skye, from whence we received it by favour of J. Brodie, Eſq. and Mr. J. Mackay, and where, as Lightfoot mentions, it abounds in ſeveral freſh-water lakes, flowering in September. The Rt. Hon. Sir Joſeph Banks has lately been ſo fortunate as to receive plenty of the roots, which are perennial, in a growing ſtate.

The whole herb ſeems compoſed of tubes intercepted by numerous tranſverſe partitions. Stem naked, ſimple, ſolitary, twiſted, having 7 angles, ſcarcely ever more or leſs, and bearing a denſe head of many male flowers ſurrounded by female ones. Leaves all radical, ſwordſhaped, pointed. The blackiſh calyx and white corolla are clothed with ſilky cloſe-preſſed hairs, and tufted with ſnow-white club-ſhaped pubeſcence. Stamina in this ſpecies 4, in moſt others 3. The male flowers have abortive blunt black ſtigmas; the females differ in having acute ones, no ſta[illegible]mina, and the corolla divided to the baſe.



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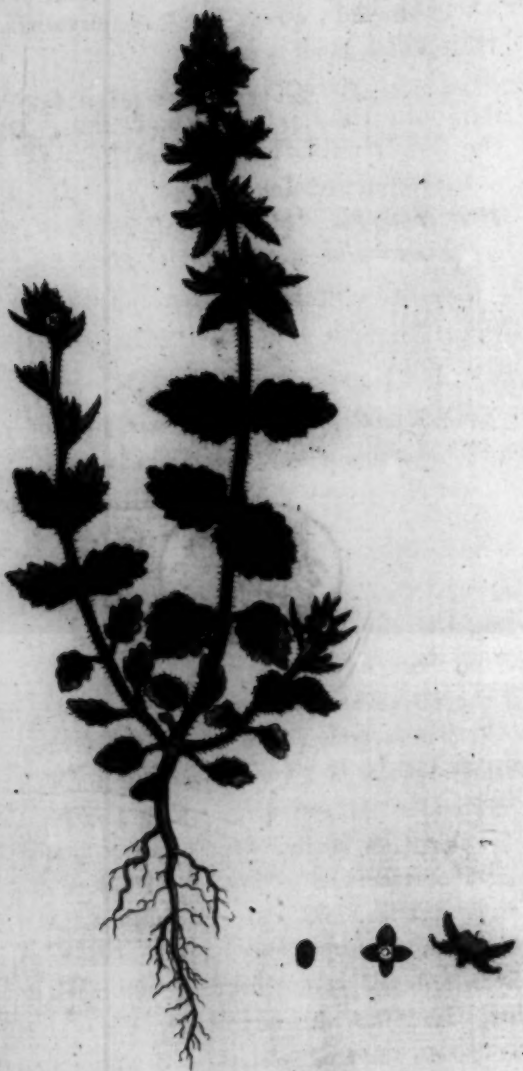


May 1. 1790. Published by J.d Sowerby, London.

VERONICA arvenſis.

Wall Speedwell.

DIANDRIA Monogynia.

GEN. CHAR. *Cor.* inferior, of one petal, four-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſule* two-celled.

SPEC. CHAR. Flowers ſolitary. Leaves ovate, deeply ſerrated; the floral ones lanceolate, longer than the flower-ſtalk. Stem erect.

SYN. Veronica arvenſis. *Linn. Sp. Pl.* 18. *Sm. Fl. Brit.* 24. *Hudſ.* 6. *With.* 12. *Hull.* 5. *Relh.* 8. *Sibth.* 6. *Abbot.* 5. *Curt. Lond. faſc.* 2. *t.* 2.

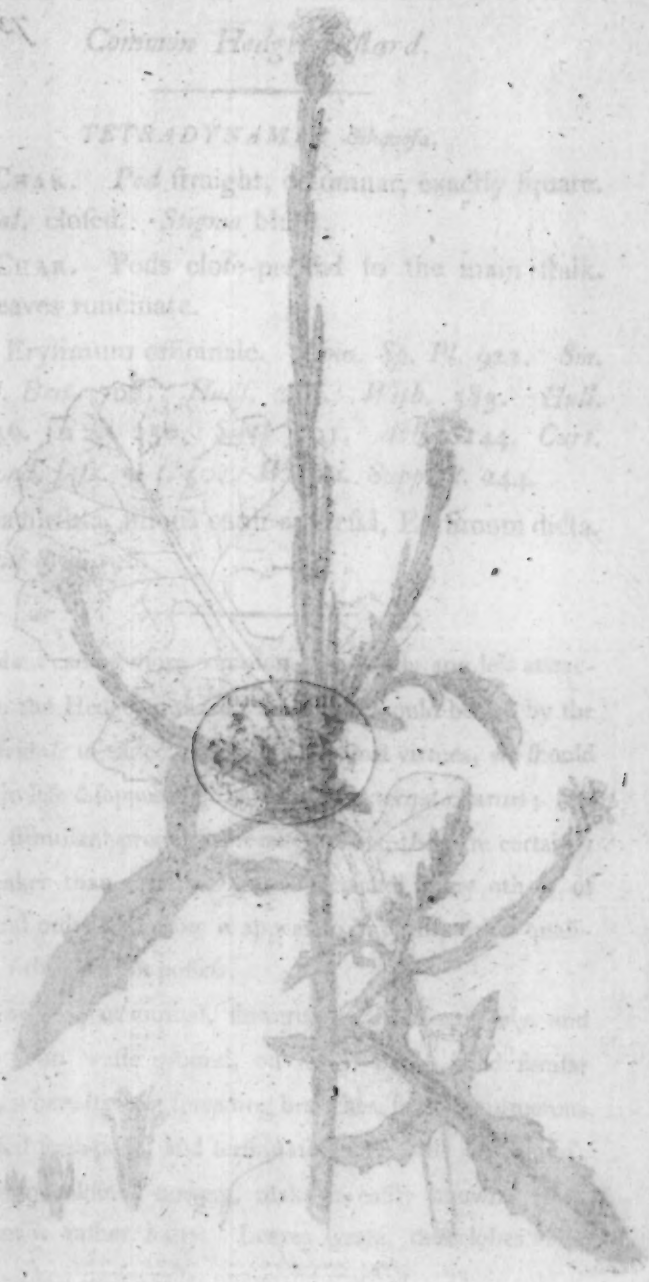
V. floſculis ſingularibus, cauliculis adhærentibus. *Raii Syn.* 279.

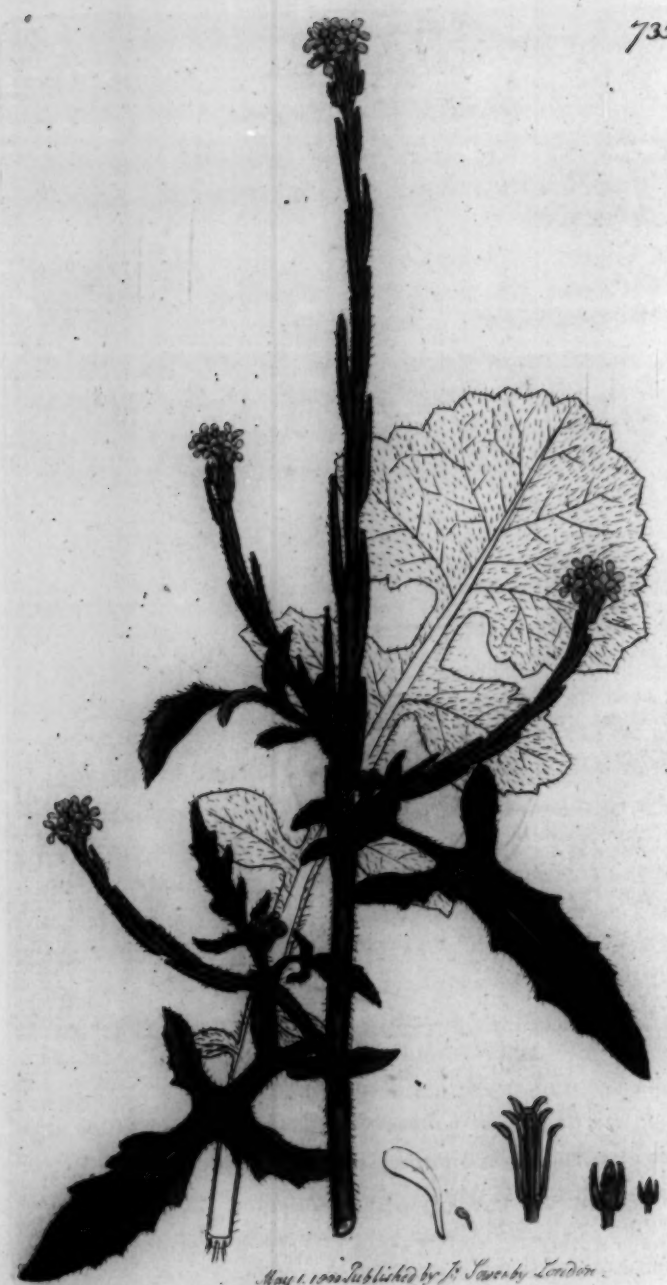
FREQUENT in dry gravelly fields, waſte ſandy places, and on the tops of walls, flowering in May.

Root annual, fibrous. Whole herb generally of a paler colour than the moſt common ſpecies of *Veronica, agreſtis* and *hederifolia*, nor is it ſo apt to turn black in drying. The ſtem is about 6 inches high, erect, generally branched at the baſe. Leaves oppoſite, ovate, hairy, ſtrongly ſerrated; the lower ones chiefly on ſhort foot-ſtalks; the upper ones, from whoſe boſoms the flowers are produced, are lanceolate, narrow and entire, ſo as more properly to be called *bracteæ*; and hence Dr. Withering has lately removed this and V. *verna* to the ſpiked ſection of the genus, to which however they are not naturally akin, nor ought they to be ſeparated from *triphyllos* and other annual ſpecies. The flowers of V. *arvenſis* ſtand on ſhort ſtalks, and are ſmall, pale-blue, with 4 lanceolate, entire, rather unequal, ſegments to their calyx. Capſule inverſely heartſhaped, compreſſed, ciliated. Seeds ſeveral, elliptical, flat, with a little dimple in the middle of one ſide. The form of the ſeeds and of the calyx-leaves will be found to afford the moſt beautiful and certain marks of ſpecific diſtinction, particularly of the annual ſpecies, in this genus.

ERYSIMUM officinale.

Common Hedge Mustard.





May 1. 1799 Published by J. Sowerby London.

ERYSIMUM officinale.

Common Hedge-muſtard.

TETRADYNAMIA Siliquoſa.

GEN. CHAR. *Pod* ſtraight, columnar, exactly ſquare. *Cal.* cloſed. *Stigma* blunt.

SPEC. CHAR. Pods cloſe-preſſed to the main ſtalk. Leaves runcinate.

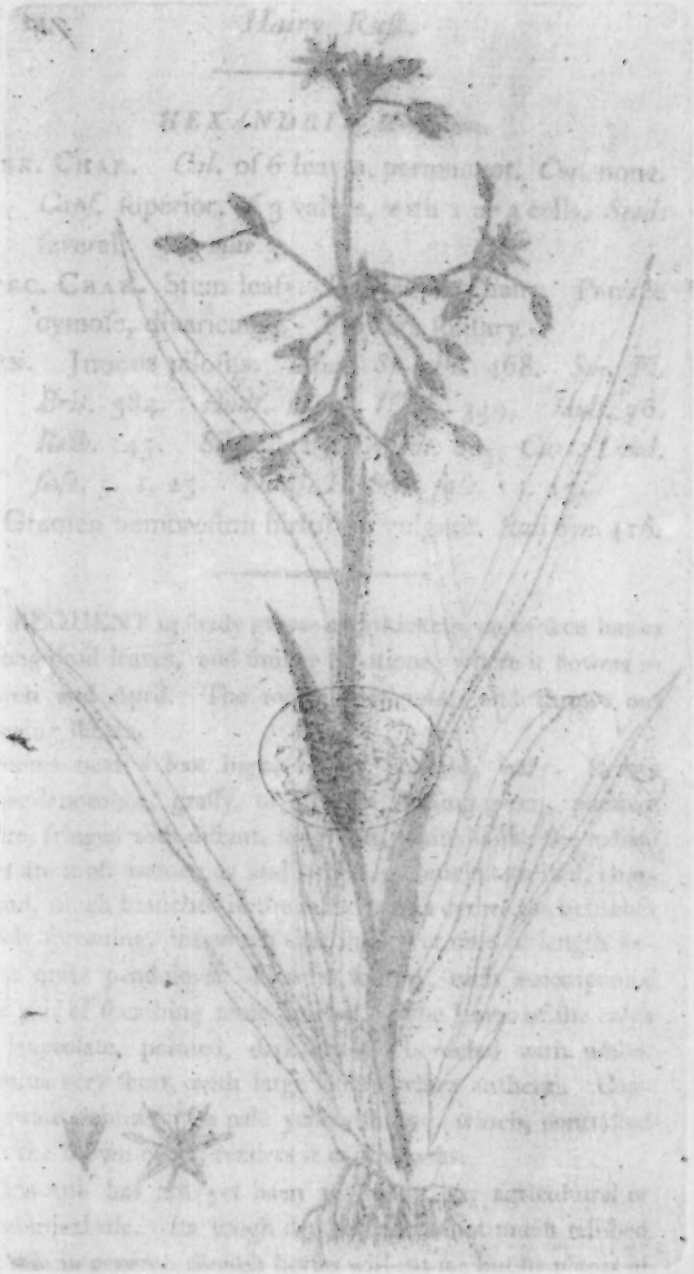
SYN. Eryſimum officinale. *Linn. Sp. Pl.* 922. *Sm. Fl. Brit.* 706. *Hudſ.* 286. *With.* 583. *Hull.* 146. *Relh.* 250. *Sibth.* 201. *Abbot.* 144. *Curt. Lond. faſc.* 5. *t.* 50. *Woodv. Suppl. t.* 244.

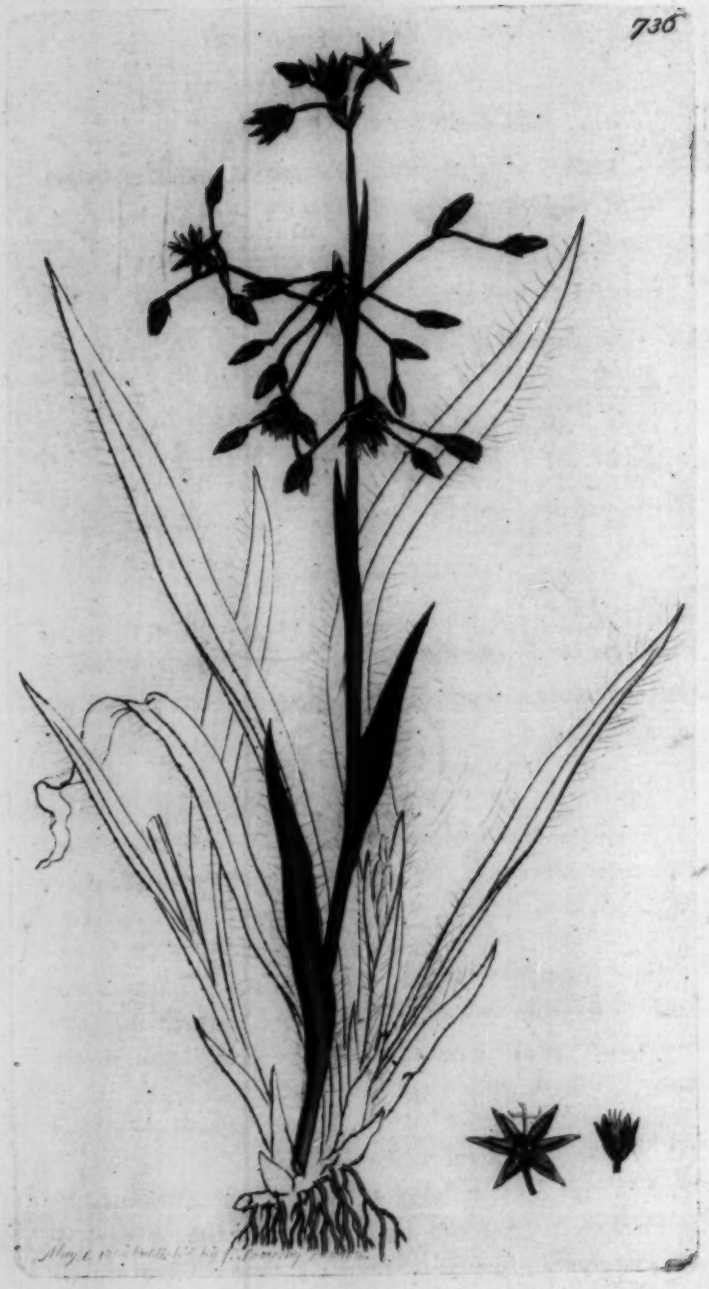
Eruca hirſuta, ſiliquâ cauli appreſsâ, Eryſimum dicta. *Raii Syn.* 298.

NO plant can be more common, nor hardly any leſs attractive, than the Hedge-muſtard; and if we ſhould be led by the name *officinale* to expect any latent medical virtues, we ſhould be ſcarcely leſs diſappointed than in its external charms; for, whatever ſtimulant properties it may poſſeſs, they are certainly much weaker than thoſe of the *Sinapis* and many others of this natural order, nor does it appear to have any other qualities which they do not poſſeſs.

E. *officinale* is an annual, flowering in June and July, and to be found in waſte ground, on hedge banks, and ſimilar ſituations, where its long ſpreading branches, ſet with numerous cloſe-preſſed ſeed-pods, and terminating in a little denſe cluſter of lemon-coloured flowers, make it eaſily known. The whole plant is rather hairy. Leaves lyrate, their lobes *runcinate* or hooked backwards, unequally toothed. Their colour is a dull hoary green.

JUNCUS. pilosus.





JUNCUS piloſus.

Hairy Ruſh.

HEXANDRIA Monogynia.

GEN. CHAR. *Cal.* of 6 leaves, permanent. *Cor.* none. *Capſ.* ſuperior, of 3 valves, with 1 or 3 cells. *Seeds* ſeveral. *Stigmas* 3.

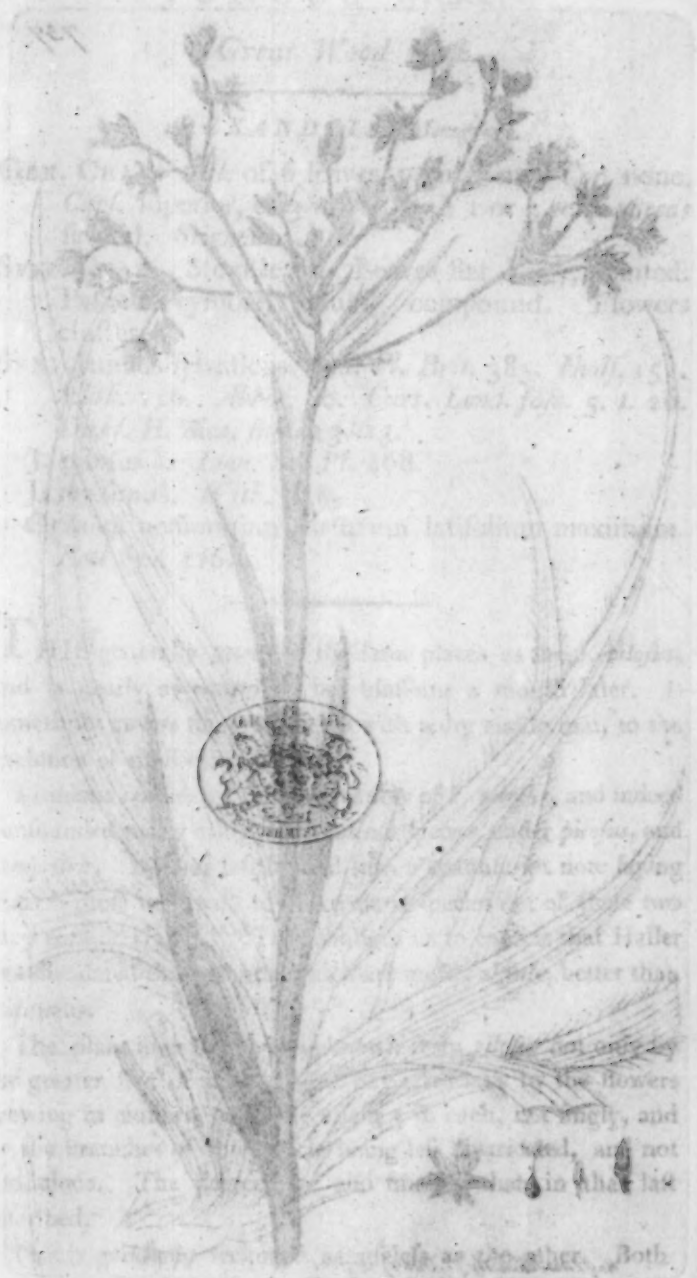
SPEC. CHAR. Stem leafy. Leaves flat, hairy. Panicle cymoſe, divaricated. Flowers ſolitary.

SYN. Juncus piloſus. *Linn. Sp. Pl.* 468. *Sm. Fl. Brit.* 384. *Hudſ.* 151. *With.* 349. *Hull.* 76. *Relh.* 145. *Sibth.* 115. *Abbot.* 80. *Curt. Lond. faſc.* 5. *t.* 25. *Dickſ. H. Sicc. faſc.* 14. 15.
Gramen nemoroſum hirſutum vulgare. *Raii Syn.* 416.

FREQUENT in ſhady groves and thickets, on broken banks among dead leaves, and ſimilar ſituations, where it flowers in March and April. The root is perennial, and throws out creeping ſhoots.

Stems near a foot high, round, poliſhed, leafy. Leaves linear-lanceolate, graſſy, of a bright ſhining green, pointed, entire, fringed with diſtant, long, ſoft, white hairs; the radical ones are moſt numerous and largeſt. Panicle terminal, compound, much branched in the manner of a cyme, the branches widely ſpreading, inſomuch that the lower ones at length become quite pendulous. Flowers ſolitary, each accompanied by a pair of ſheathing acute bracteæ. The leaves of the calyx are lanceolate, pointed, dark-brown, bordered with white. Stamina very ſhort, with large ſquare yellow antheræ. Capſule ovate, obtuſe, of a pale yellowiſh hue, which, contraſted with the brown calyx, renders it conſpicuous.

This ruſh has not yet been applied to any agricultural or œconomical uſe. Its tough dry herbage is not much reliſhed by cattle in general, though horſes will eat it; but its places of growth are often ſcarcely acceſſible to them.



May 1 1830 Published by J.C. Sowerby Londan.

JUNCUS ſylvaticus.

Great Wood Ruſh.

HEXANDRIA Monogynia.

GEN. CHAR. *Cal.* of 6 leaves, permanent. *Cor.* none. *Capſ.* ſuperior, of 3 valves, with 1 or 3 cells. *Seeds* ſeveral. *Stigmas* 3.

SPEC. CHAR. Stem leafy. Leaves flat, hairy, pointed. Panicle cymoſe, doubly compound. Flowers cluſtered.

SYN. Juncus ſylvaticus. *Sm. Fl. Brit.* 385. *Hudſ.* 151. *Sibth.* 116. *Abbot.* 80. *Curt. Lond. faſc.* 5. *t.* 26. *Dickſ. H. Sicc. faſc.* 13. 13.

J. piloſus δ. *Linn. Sp. Pl.* 468.

J. maximus. *With.* 349.

Gramen nemoroſum hirſutum latifolium maximum. *Raii Syn.* 416.

THIS generally grows in the ſame places as the J. *piloſus*, and is nearly as common, but bloſſoms a month later. It ſometimes covers the ground, as with a dry elaſtic mat, to the excluſion of moſt other plants.

Linnæus conſidered this as a variety of J. *piloſus*, and indeed confounded many other moſt diſtinct ſpecies under *piloſus*, and *campeſtris*. He has left behind him a manuſcript note ſaying that "thoſe who wiſh to make many ſpecies out of theſe two may conſult Haller." Truth obliges us to confeſs that Haller has elucidated theſe plants, which are moſtly alpine, better than Linnæus.

The plant now before us is known from *piloſus* not only by the greater ſize of its herbage, but eſſentially by the flowers growing in cluſters, generally about 3 in each, not ſingly, and by the branches of the panicle being leſs divaricated, and not pendulous. The flowers are alſo ſmaller than in that laſt deſcribed.

This is generally reckoned as uſeleſs as the other. Both ſeem however not ill calculated for packing, or for ſtuffing mattreſſes inſtead of common ſtraw, being very ſoft and elaſtic.

LICHEN cretaceus.

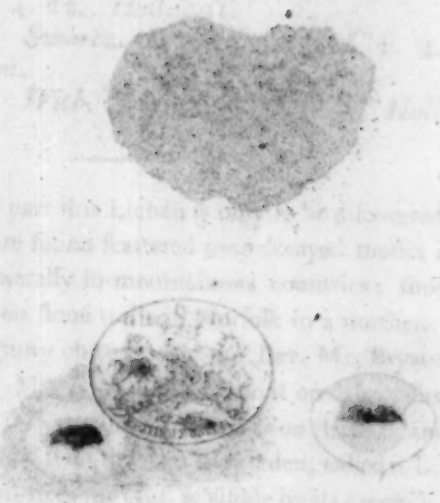
Chalk Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts. Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Cruſt lobed, ſtellated, dark-olive. Shield central, ſolitary, elevated, browniſh-fleſh-coloured, with a paler elevated entire border.

WE believe this curious little Lichen to have hitherto remained undeſcribed. Though very common on chalk, as well as on the white coating of flint ſtones, over which it is ſcattered in the form of minute olive-coloured or blackiſh ſtars, it is ſeldom found in fructification, to which muſt be attributed its having ſo long remained in obſcurity. Our perfect ſpecimens were gathered on chalk by Dr. Noehden, and Mr. Gotobed of Eton. Few of them exceed the diameter of a large pin's head, and are compoſed of a ſpreading lobed prominent cruſt, in whoſe centre, when the plant is in perfection, ſtands a very conſpicuous elevated ſhield, of a pale reddiſh brown, or rather a brown fleſh-colour, ſomewhat turbinate, ſmooth; its diſk concave, ſurrounded with a paler, elevated, ſmooth and entire border.



LICHEN marmoreus.

Salmon-coloured Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts. Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Cruſt pale, thin, ſcattered. Shields cup-ſhaped, ſalmon-coloured, with a thick, elevated, inflexed, pale fleſh-coloured, often crenate, border.

SYN. Lichen marmoreus. *Dickſ. Crypt. faſc.* 2. 18. *With. v.* 4. 22. *Hull.* 291.

L. Ulmi. *Swartz. Nov. Act. Upſal. v.* 4. 247. *Herb. Linn.*

L. tricolor. *With. v.* 4. 23. *t.* 31. *f.* 6. *Hull.* 291.

FOR the moſt part this Lichen is only to be diſcovered by its ſhields, which are found ſcattered over decayed moſſes in wet ſhady places, generally in mountainous countries; though it has been found on ſtone walls in Norfolk in a northern expoſure; as on Corpuſty church, by the Rev. Mr. Bryant, and Mr. D. Turner. Mr. Griffith has found it on calcareous ſandſtone in Wales. Sometimes it occurs on trees; and Dr. Swartz having found it on the Elm in Sweden, called it L. *Ulmi*. When it grows on trees the cruſt is viſible by its greeniſh white colour, though extremely thin, and by no means lobed or granulated; on old moſſes it ſoon vaniſhes almoſt entirely, what remains of it being only ſuch ſlight portions as are neceſſary to fix the ſhields to the minute leaves, fibres, or twigs, on which they grow. Each ſhield is but the ſize of the ſmalleſt pin's head, or ſmaller, prominent, concave, of a fine ſalmon or aurora colour, encompaſſed by a thick elevated inflexed margin of the moſt delicate pale fleſh-colour, and with a marble-like ſemitranſparency, externally ſo uneven as to appear mealy or downy, which however it is not. The diſk at length falls out, and this waxy covering often remains entire.

We apprehend a great error in the ſuppoſed metamorphoſis of this plant into *Sphæria ſulcata* as mentioned in Withering.

LICHEN *byssaceus*.

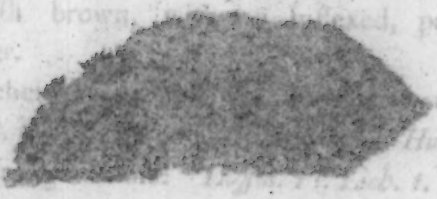
Straggling Lichen.

CRYPTOGAMIA Alga.

GEN. CHAR. Male scattered warts. Female, smooth tubercles, or tubercles, to which the seeds are imbedded.

SPEC. CHAR. Crust green, granulated. Shields flat, reddish brown, [illegible] deflexed, pale, lobed border.

SYN. Lichen [illegible] 6. *Dicks. Crypt.* [illegible] *Hall.* 290. Verruca[illegible] *Hedw.* t. 30. *f.* 3.



MR. DICKSON first made this known as a British species. It grows upon apples, sometimes on the ground, in barren sandy places. We have received it from Dr. Babington of Ludlow, and from [illegible] D. Turner. It does not seem to be confined to any particular [illegible]. Its crust is visible enough in the form of greyish green globules or scales, spreading irregularly over [illegible] and bearing small straggling shields [illegible] a pale chestnut brown, [illegible] thickened border, which when young is somewhat granulated and of the colour of the crust, but by age it becomes of a pale brown, more cracked and less granulated. In this state the shields might be taken for old ones of the *L. murorum*, but an investigation of both plants in their various stages of growth renders it impossible to confound them.

We quote Hoffmann on the authority of Dickson and Ehrhart; for his figure represents the shields in so advanced a state, we should hardly have recognized them.

London, Published by J. Sowerby, Lambeth.

LICHEN hypnorum.

Straggling Lichen.

CRYPTOGAMIA Algæ.

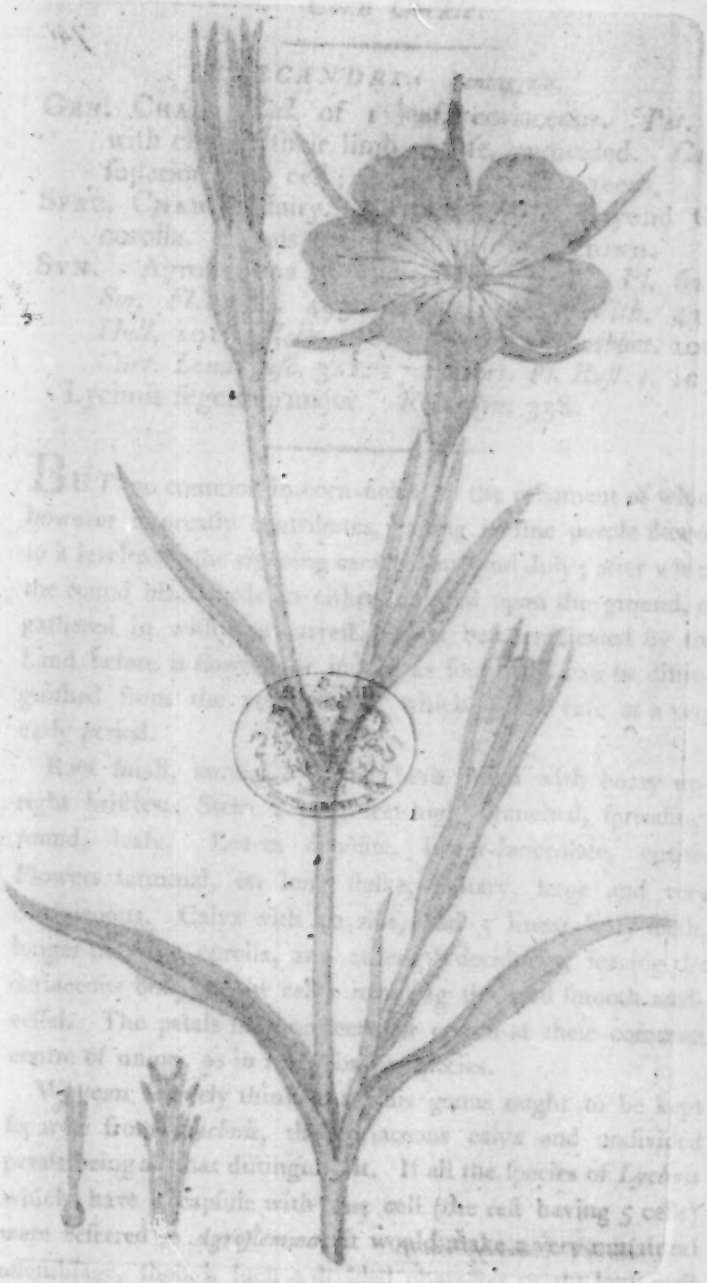
GEN. CHAR. Male, ſcattered warts. Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

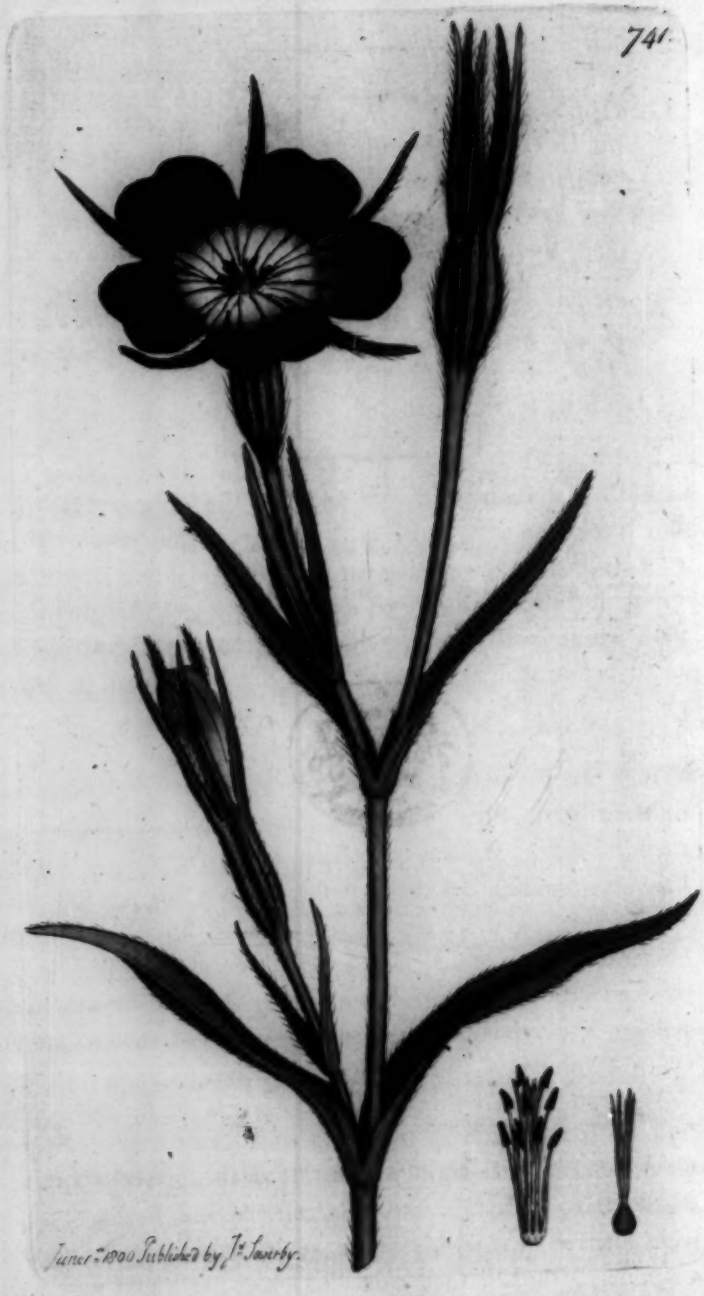
SPEC. CHAR. Cruſt green, granulated. Shields flat, reddiſh brown, with an inflexed, pale, lobed border.

SYN. Lichen hypnorum. *Fl. Dan. t.* 956. *Dickſ. Crypt. faſc.* 3. 14. *With. v.* 4. 22. *Hull.* 290.
Verrucaria granuloſa. *Hoffm. Pl. Lich. t.* 30. *f.* 3.

MR. DICKSON firſt made this known as a Britiſh ſpecies. It grows upon moſſes, ſometimes on the ground, in barren ſandy places. We have received it from Dr. Babington of Ludlow, and from Mr. D. Turner. It does not ſeem to be confined to any particular country. Its cruſt is viſible enough in the form of greyiſh green globules or ſcales, ſpreading irregularly over moſſes, or dead graſſes, and bearing ſmall ſtraggling ſhields, whoſe diſk is flat or convex, of a pale cheſnut brown, ſurrounded by a lobed incurved border, which when young is ſomewhat granulated and of the colour of the cruſt, but by age it becomes of a pale brown, more cracked and leſs granulated. In this ſtate the ſhields might be taken for old ones of the L. *marmoreus*, did not an inveſtigation of both plants in their various ſtages of growth render it impoſſible to confound them.

We quote Hoffmann on the authority of Dickſon and Ehrhart; for his figure repreſents the ſhields in ſo advanced a ſtate, we ſhould hardly have recognized them.





June 1. 1800 Published by Jas Sowerby.

AGROSTEMMA Githago.

Corn Cockle.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* of 1 leaf, coriaceous. *Pet.* 5, with claws; their limb obtuſe, undivided. *Capſ.* ſuperior, of 1 cell; the orifice with 5 teeth.

SPEC. CHAR. Hairy. Calyx reaching beyond the corolla. Petals entire, deſtitute of a crown.

SYN. Agroſtemma Githago. *Linn. Sp. Pl.* 624. *Sm. Fl. Brit.* 493. *Hudſ.* 198. *With.* 431. *Hull.* 101. *Relh.* 176. *Sibth.* 145. *Abbot.* 100. *Curt. Lond. faſc.* 3. *t.* 27. *Mart. Fl. Ruſt. t.* 105. Lychnis ſegetum major. *Raii Syn.* 338.

BUT too common in corn-fields, to the ornament of which however it greatly contributes, raiſing its fine purple flowers to a level with the ripening ears in June and July; after which the round black ſeeds are either ſcattered upon the ground, or gathered in with the harveſt. It is beſt eradicated by the hand before it flowers, or indeed as ſoon as it can be diſtinguiſhed from the young corn, which is the caſe at a very early period.

Root ſmall, annual. Whole herb rough with hoary upright briſtles. Stem 2 or 3 feet high, branched, ſpreading, round, leafy. Leaves oppoſite, linear-lanceolate, entire. Flowers terminal, on long ſtalks, ſolitary, large and very conſpicuous. Calyx with 10 ribs, and 5 linear leafy teeth, longer than the corolla, and at length deciduous, leaving the coriaceous body of the calyx inveſting the hard ſmooth ſeed-veſſel. The petals have no teeth or crown at their common centre of union, as in ſome foreign ſpecies.

We can ſcarcely think that this genus ought to be kept ſeparate from *Lychnis*, the coriaceous calyx and undivided petals being all that diſtinguiſh it. If all the ſpecies of *Lychnis* which have a capſule with one cell (the reſt having 5 cells) were referred to *Agroſtemma*, it would make a very unnatural aſſemblage, though ſuch a decided character might look well upon paper.

June 1. 1810 Published by J. Sowerby London.

ULEX europæus.

Common Furze, or Whin.

DIADELPHIA Decandria.

GEN. CHAR. *Cal.* of 2 leaves, almoſt as long as the *pod. Stamina* all connected.

SPEC. CHAR. Teeth of the calyx obſolete, converging. Bracteæ ovate, lax. Branches erect.

SYN. Ulex europæus. *Linn. Sp. Pl.* 1045. *Sm. Fl. Brit.* 756. *Hudſ.* 312. *Forſt. in Sym. Syn.* 160. *With.* 626, *var.* 1. *Hull.* 159. *Relh.* 269. *Sibth.* 220. *Abbot.* 154. *Fl. Dan. t.* 608.

Geniſta ſpinoſa vulgaris. *Raii Syn.* 475.

BARREN ſandy heaths and commons produce this plant in profuſion; nor can any thing be conceived more brilliant than Putney heath, for example, in the month of May, when its honey-ſcented bloſſoms ſpread in one ſheet of "vegetable gold" over the whole country. Linnæus is reported on his arrival in England to have fallen on his knees in a rapture of admiration at this ſpectacle. He always lamented that he could hardly preſerve the Furze alive through a Swediſh winter, even in a green-houſe. Indeed our own froſts frequently cut it down to the root.

Stem ſhrubby, compoſed of innumerable, denſe, green, ſpinous, ſtriated branches. Leaves awl-ſhaped, ſolitary, pungent, roughiſh, deciduous. Flowers axillary, on ſhort downy ſtalks, large, bright-yellow. Calyx of two, pale-green, downy, ſomewhat ruſty, concave leaves, with a pair of ovate, ſpreading, downy bracteæ at their baſe. The uppermoſt calyx-leaf terminates in 2, the lowermoſt in 3, minute blunt teeth, ſo cloſely adhering together as to be not at firſt diſcernible. The ſtamina are all united at their baſe, ſo as to be in fact monadelphous. Pod oblong, downy, containing about 4 ſeeds.

The *Ulex* is much uſed for firing by the poor. It ought not to be cut on the ſame ſpot more than once in 3 or 4 years, when it attains its full ſize.

June 1, 1820. Published by Jas. Somerby, London.

ULEX nanus.

Dwarf Furze.

DIADELPHIA Decandria.

GEN. CHAR. *Cal.* of 2 leaves, almoſt as long as the *pod*. *Stamina* all connected.

SPEC. CHAR. Teeth of the calyx lanceolate, ſpreading. Bracteæ minute, cloſe-preſſed. Branches reclining.

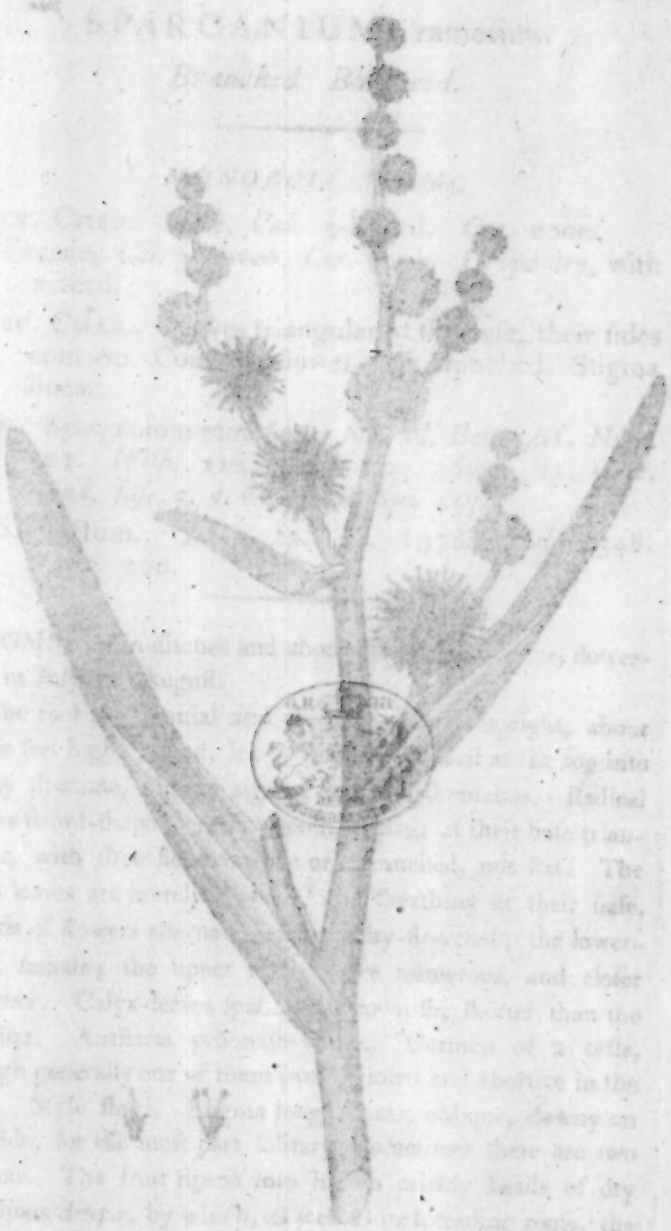
SYN. Ulex nanus. *Forſt. in Sym. Syn.* 160. *Sm. Fl. Brit.* 757.

U. europæus β. *Linn. Sp. Pl.* 1045. *Hudſ.* 312. *Relh.* 270. *With.* 626, *var.* 2. *Hull.* 159, *var.* 2.

Geniſta ſpinoſa minor. *Raii Syn.* 475.

THIS, which moſt botaniſts have conſidered as a variety of the Common Furze, is by no means ſo general a plant, though it grows copiouſly upon dry elevated heaths in many parts of the kingdom. It is at firſt ſight diſtinguiſhed by its much more humble, and partly proſtrate, growth; its ſmaller and paler flowers, which are chiefly produced from Auguſt to October; and a certain elongated and cylindrical form of the branches laden with flowers interſperſed with horizontal, or partly deflexed, ſpines. Theſe however are not all its diſtinguiſhing marks. The flowers afford certain ſpecific characters. The bracteæ are very minute, brown, cloſe-preſſed to the calyx, often hardly viſible. The calyx is more ſilky and yellow; its teeth deeply cut, ſpreading, and very evident: a circumſtance which will always prevent its being confounded with the other ſpecies.

Theſe plants, though ſo common with us, are by no means of general occurrence throughout Europe. Portugal, and the weſtern parts of France, produce them more plentifully than any other country except our own.



Published by J. Sowerby

SPARGANIUM ramoſum.

Branched Bur-reed.

MONOECIA Triandria.

GEN. CHAR. Male, *Cal.* 3-leaved. *Cor.* none. Female, *Cal.* 3-leaved. *Cor.* none. *Drupa* dry, with 1 ſeed.

SPEC. CHAR. Leaves triangular at the baſe, their ſides concave. Common flower-ſtalk branched. Stigma linear.

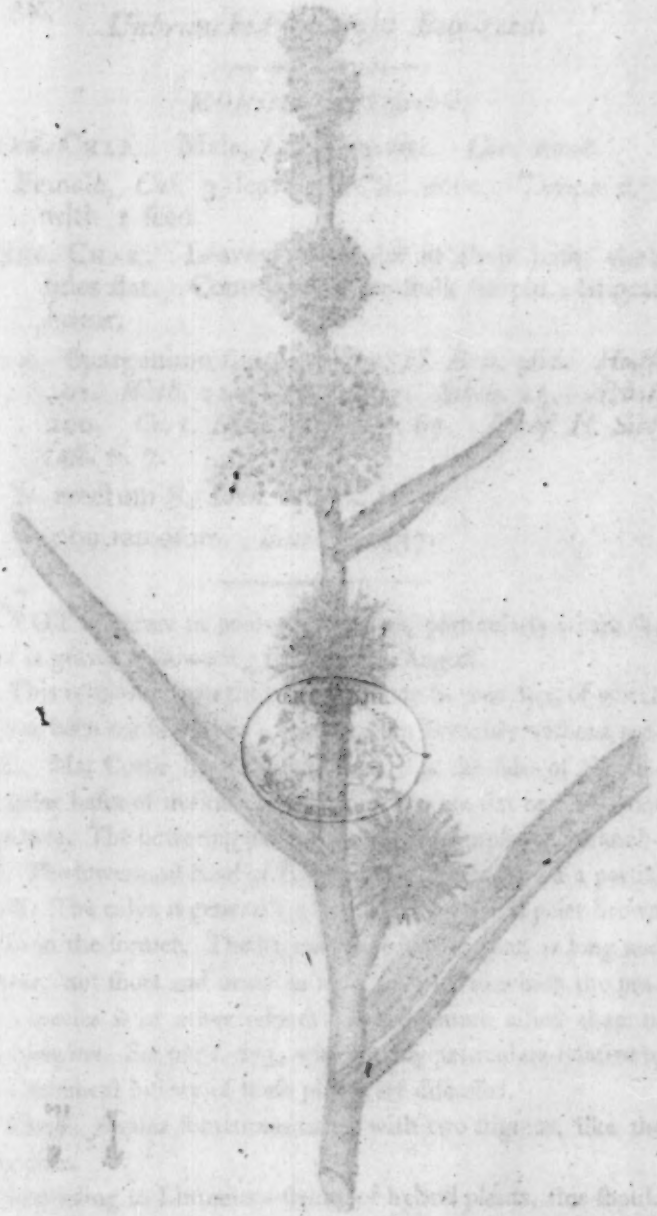
SYN. Sparganium ramoſum. *Sm. Fl. Brit.* 961. *Hudſ.* 401. *With.* 112. *Hull.* 203. *Sibth.* 25. *Curt. Lond. faſc.* 5. *t.* 66. *Raii Syn.* 437.

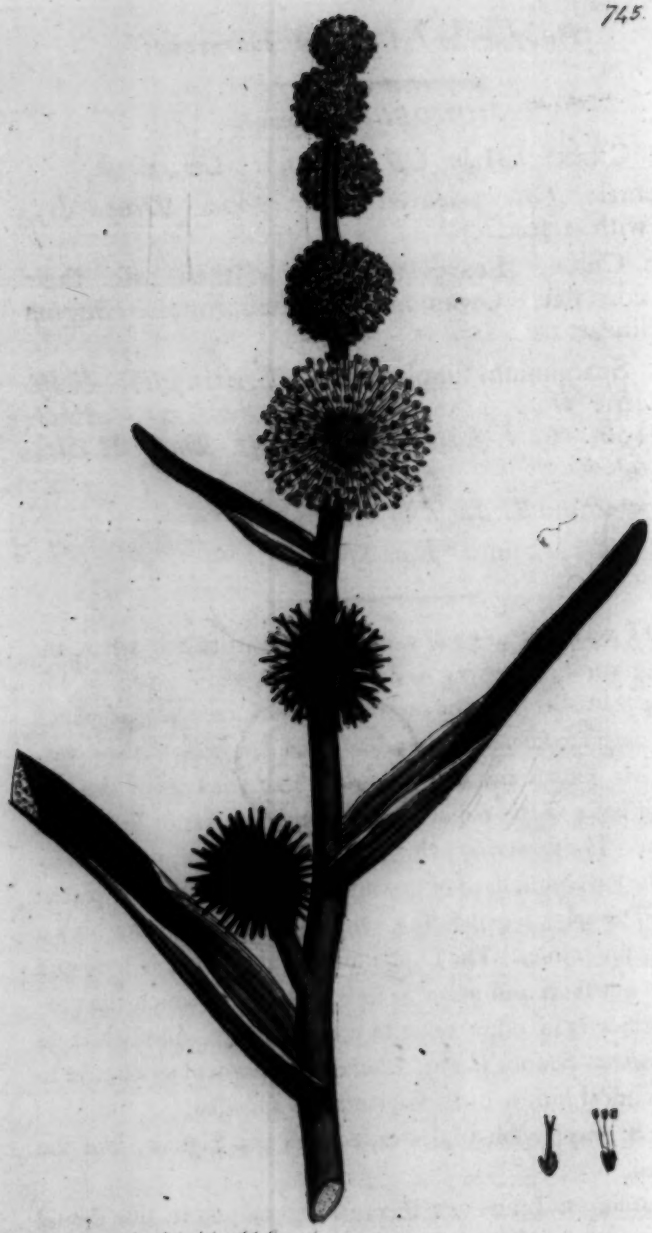
S. erectum. *Linn. Sp. Pl.* 1378. *Relh.* 348. *Abbot.* 200.

COMMON in ditches and about the banks of rivers, flowering in July and Auguſt.

The root is perennial and creeping. Stem upright, about three feet high, round, leafy, ſmooth, divided at the top into many alternate, ſlightly zigzag, flowering-branches. Radical leaves ſword-ſhaped, erect, ſmooth, entire; at their baſe triangular, with their ſides concave or channelled, not flat. The ſtem leaves are merely concave, and ſheathing at their baſe. Heads of flowers alternate, ſeſſile, many-flowered; the lowermoſt female; the upper male, more numerous, and cloſer together. Calyx-leaves ſpatulate, browniſh, ſhorter than the ſtamina. Antheræ yellowiſh-white. Germen of 2 cells, though generally one of them is obliterated and abortive in the fruit. Style ſhort. Stigma long, linear, oblique, downy on one ſide, for the moſt part ſolitary; ſometimes there are two ſtigmas. The fruit ripens into brown prickly heads of dry deciduous *drupæ*, by which, as well as its ſpreading roots, the plant increaſes abundantly.

The parts of fructification vary much in number, as uſual in monoecious and dioecious plants; one of the many reaſons for keeping them in diſtinct claſſes from the hermaphrodite ones.





Sowerby's mss. Published by J.ª Sowerby, 1 ...

SPARGANIUM ſimplex.

Unbranched Upright Bur-reed.

MONOECIA Triandria.

GEN. CHAR. Male, *Cal.* 3-leaved. *Cor.* none.

Female, *Cal.* 3-leaved. *Cor.* none. *Drupa* dry, with 1 ſeed.

SPEC. CHAR. Leaves triangular at their baſe, their ſides flat. Common flower-ſtalk ſimple. Stigma linear.

SYN. Sparganium ſimplex. *Sm. Fl. Brit.* 962. *Hudſ.* 401. *With.* 112. *Hull.* 203. *Sibth.* 25. *Abbot.* 200. *Curt. Lond. faſc.* 5. *t.* 67. *Dickſ. H. Sicc. faſc.* 6. 7.

S. erectum β. *Linn. Sp. Pl.* 1378.

S. non ramoſum. *Raii Syn.* 437.

NOT very rare in pools and ditches, particularly where the ſoil is gravelly, flowering in July and Auguſt.

This is ſmaller than the more common S. *ramoſum*, of which it has been conſidered as a variety, but certainly without reaſon. Mr. Curtis has well remarked that the ſides of the triangular baſes of the radical leaves in this are flat or level, not concave. The flowering part of the ſtem is ſimple, not branched. The lowermoſt head of flowers ſtands generally on a partial ſtalk. The calyx is generally green, or at leaſt of a paler brown than in the former. The ſtigma indeed, as in that, is long and linear, not ſhort and ovate as in S. *natans*, to which the preſent ſpecies is in other reſpects perhaps more allied than to S. *ramoſum*. See our *t.* 273, where many particulars relative to the botanical hiſtory of theſe plants are diſcuſſed.

The S. *ſimplex* ſometimes varies with two ſtigmas, like the *ramoſum*.

According to Linnæus's theory of hybrid plants, this ſhould be a mule produced by S. *ramoſum* impregnated by S. *natans*; but we would be cautious in ſelecting facts to ſupport ſo fanciful an hypotheſis.

TAXUS baccata.

Yew Tree.

DIOECIA Monadelphia.

GEN. CHAR. Male, *Cal.* none. *Cor.* none. *Stam.* numerous. *Anth.* peltate, lobed.

Female, *Cal.* cup-ſhaped, entire. *Style* none. *Seed* 1, ſtanding on the pulpy calyx.

SPEC. CHAR. Leaves thickly ſet.

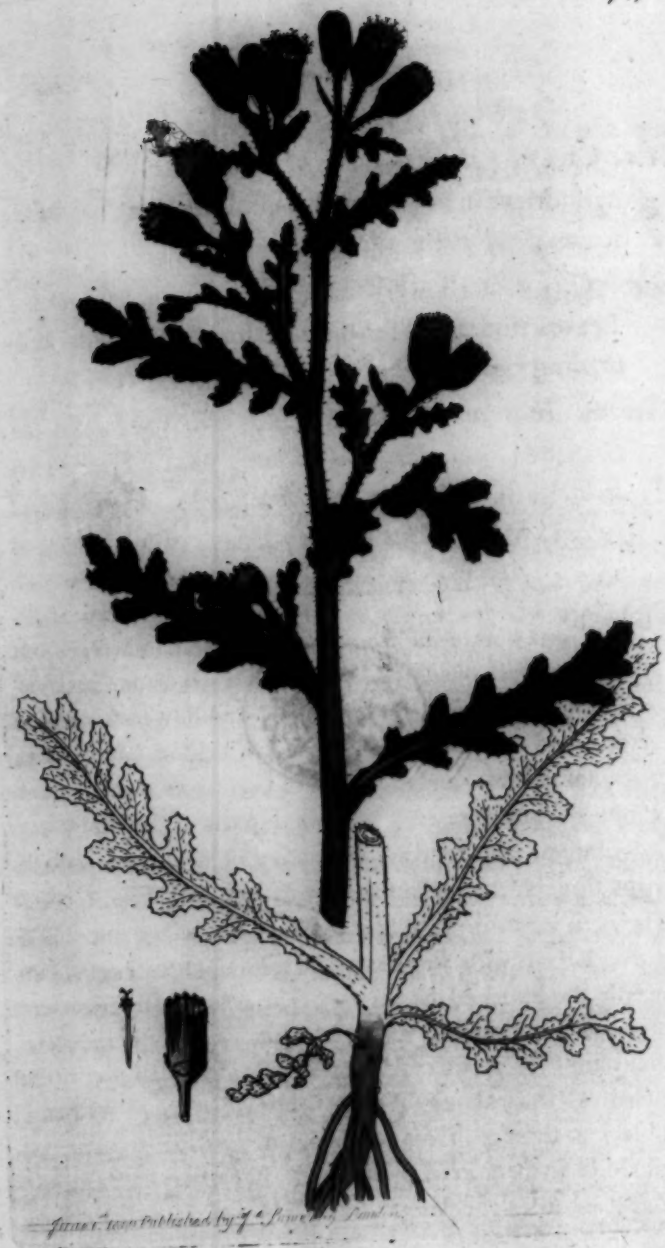
SYN. Taxus baccata. *Linn. Sp. Pl.* 1472. *Hudſ.* 437. *With.* 614. *Hull.* 222. *Relh.* 374. *Sibth.* 216.

Taxus. *Raii Syn.* 445.

THE proper wild ſituation of the common yew is in mountainous woods, or more particularly the clefts of high calcareous rocks. Several fine old trees of this ſpecies, from which our ſpecimen was taken, are to be ſeen on ſome ſandy rocks about 2 miles from Withyam and 5 from Tunbridge. It flowers in March and April. The fruit ripens in autumn.

The trunk is known by its ſtraight form and ſmooth deciduous bark. The wood is very hard, tough, and of a fine grain, famous in ancient times for making bows, and uſed in more modern days in the finer kinds of cabinet work for inlaying. Church-yards in the mountainous parts of Britain, eſpecially in Wales, are always planted with yew-trees, ſuppoſed to have been intended to furniſh bows for the village archers. The gloomy funereal aſpect of the tree might be another cauſe of its being planted in ſuch ſituations; its being eaſily clipped without injury into the moſt whimſical ſhapes, ſeems the only reaſon why it could find a place in the pleaſure garden. The leaves are thickly ſet, linear, ſmooth, ever-green. Flowers axillary, enveloped with imbricated bracteæ; the male on one tree, ſulphur-coloured, without a calyx; the female on another, with a ſmall green calyx ſuſtaining the oval flattiſh ſeed, which calyx at length becomes red, ſoft, full of a ſweet ſlimy pulp, that is not unwholeſome, though the leaves are very poiſonous.

SENECIO vulgaris.



James Sowerby published by J.ª Sowerby, Lond.ª

SENECIO vulgaris.

Common Groundſel.

SYNGENESIA Polygamia-ſuperflua.

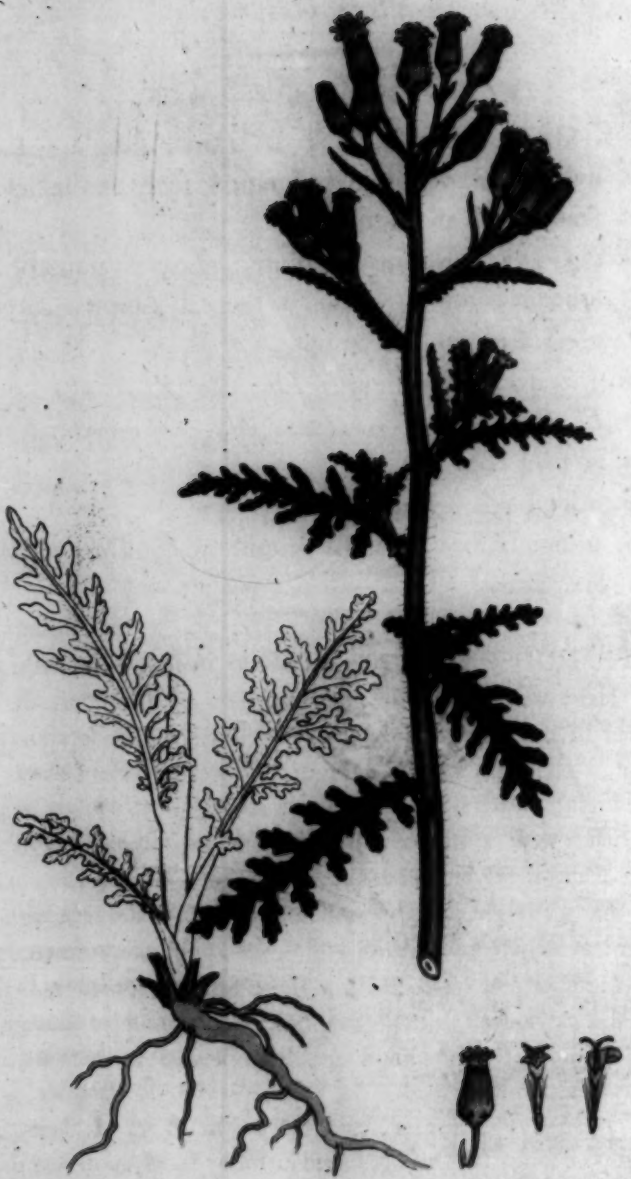
GEN. CHAR. *Recept.* naked. *Down* ſimple. *Cal.* cylindrical, many-leaved, equal, ſcaly at the baſe; ſcales dead at the tip.

SPEC. CHAR. Flowers without a radius, ſcattered. Leaves ſinuated in a pinnate form, toothed, embracing the ſtem.

SYN. Senecio vulgaris. *Linn. Sp. Pl.* 1216. *Sm. Fl. Brit.* 881. *Hudſ.* 365. *With.* 721. *Hull.* 186. *Relh.* 315. *Sibth.* 252. *Abbot.* 182. *Curt. Lond. faſc.* 1. *t.* 61. *Raii Syn.* 178.

EVERY one knows the Common Groundſel, a weed found in all kinds of cultivated ground, as well as on banks by road-ſides, and ſimilar places. It is annual, and flowers almoſt all the year round. The flower-buds and young tops are the food of many ſmall birds, and are given to Canary-birds and others in a ſtate of confinement. In ſeveral parts of England it is called Simſon, apparently a corruption of the Latin *Senecio*, perhaps through the medium of the French *Seneſſon*.

The herb varies in ſize, and is either altogether ſmooth, or ſlightly clothed with ſoft hairs and a kind of cottony down, eſpecially the backs of the leaves. The colour of the leaves is a bright ſhining green, and their ſmell merely herbaceous, without any very peculiar odour. Flowers terminal, ſomewhat panicled. All the ſcales of the calyx very conſpicuouſly withered, and black at the tip. Corolla compoſed of yellow tubular hermaphrodite fertile florets, without any radiating ones, ſo that this ſpecies ſtrictly belongs to the firſt order of *Syngeneſia*. Seeds furrowed, pubeſcent. Down which crowns the ſeed ſeſſile, rough.



June 1, 1806. Published by T. Cadell & W. Davies, Strand.

SENECIO ſylvaticus.

Mountain Groundſel.

SYNGENESIA Polygamia-ſuperflua.

GEN. CHAR. *Recept.* naked. *Down* ſimple. *Cal.* cylindrical, many-leaved, equal, ſcaly at the baſe; ſcales dead at the tip.

SPEC. CHAR. Radius revolute. Leaves pinnatifid, lobed, toothed. Scales of the calyx ſhort. Stem erect, ſtraight, corymboſe.

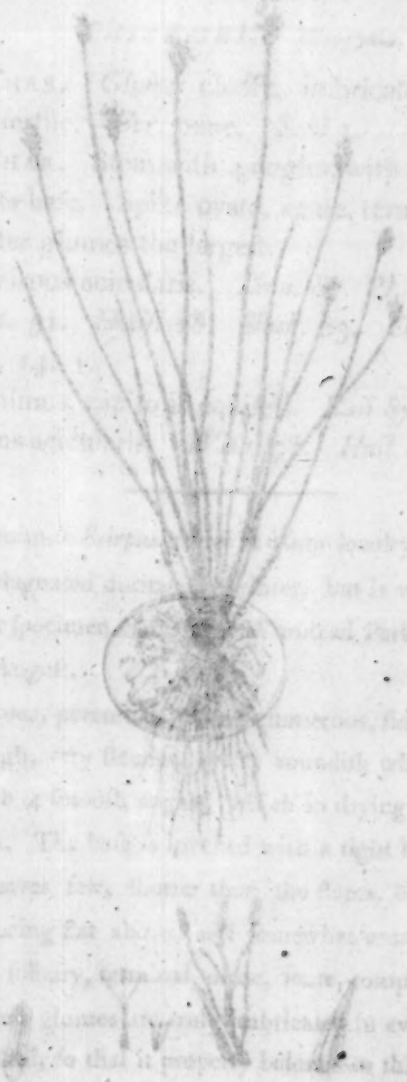
SYN. Senecio ſylvaticus. *Linn. Sp. Pl.* 1217. *Sm. Fl. Brit.* 883. *With.* 722. *Hull.* 186. *Sibth.* 253. *Abbot.* 182.

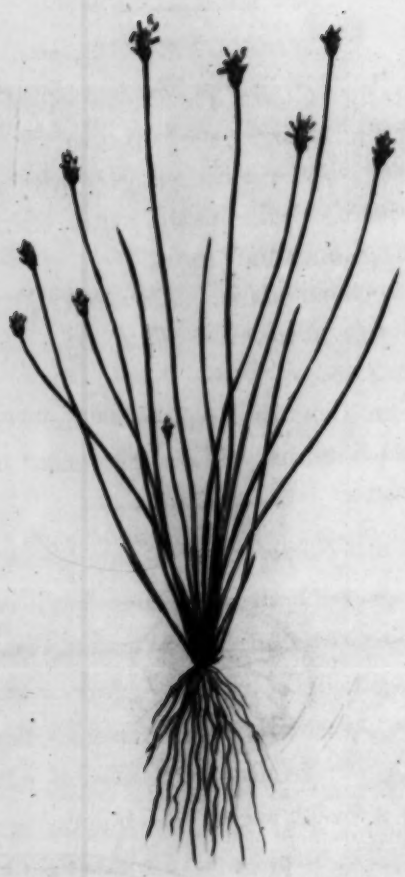
S. viſcoſus β. *Hudſ.* 365.

S. minor latiore folio, ſive montanus. *Dill. in Raii Syn.* 198.

MR. HUDSON was almoſt ſingular in the opinion that this plant was a variety of the S. *viſcoſus* of Linnæus, delineated in our firſt vol. *t.* 32, to which we ſee no reaſon to aſſent. That ſpecies has a branched ſpreading ſtem about a foot high; flowers leſs corymboſe, twice or thrice as large as theſe, with a much more conſpicuous radius, and the calyx-ſcales nearly equal to the calyx itſelf; this on the contrary has a ſtraight upright wand-like ſtem, about 3 feet high; upper leaves more finely divided; flowers corymboſe, numerous, much ſmaller and paler, with a ſhort ſmall recurved radius, and the calyx-ſcales ſmall and ſhort as in moſt of the genus; the herb, though almoſt equally unpleaſant in its ſcent, is however much leſs viſcid.

S. *ſylvaticus* is annual, and flowers in July. It loves a gravelly or ſandy ſoil, and is found in buſhy ſpots upon heaths, where trees or furze have been cut down; eſpecially where brakes or other plants have been burnt in the preceding autumn.





Published by

SCIRPUS acicularis.

Leaſt Club-ruſh.

TRIANDRIA Monogynia.

GEN. CHAR. *Glumes* chaffy, imbricated every way, all fertile. *Cor.* none. *Seed* 1.

SPEC. CHAR. Stem with 4 angles, with a blunt ſheath at its baſe. Spike ovate, acute, terminal, ſolitary. Outer glumes the largeſt.

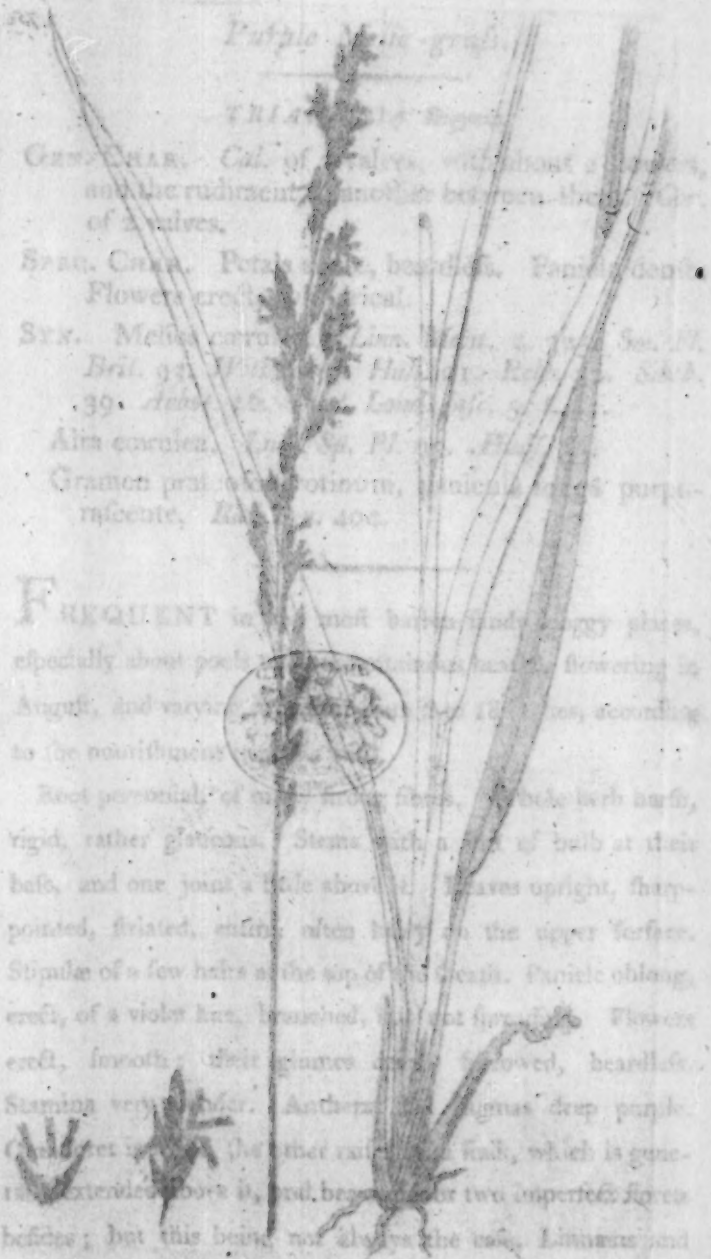
SYN. Scirpus acicularis. *Linn. Sp. Pl.* 71. *Sm. Fl. Brit.* 51. *Hudſ.* 18. *Sibth.* 23. *Dickſ. H. Sicc. faſc.* 14. 1.

S. minimus, capitulis equiſeti. *Raii Syn.* 429.

Cyperus acicularis. *With.* 78. *Hull.* 13.

THIS minute *Scirpus* grows in damp heathy places, where water has ſtagnated during the winter, but is very rarely met with. Our ſpecimen came from Wanſtead Park, Eſſex, in the middle of Auguſt.

Root fibrous, perennial. Stems numerous, ſimple, from 2 to 4 inches high, very ſlender, erect, roundiſh when freſh, but marked with 4 ſmooth angles, which in drying become very conſpicuous. The baſe is inveſted with a tight blunt beardleſs ſheath. Leaves few, ſhorter than the ſtems, obſoletely quadrangular, being flat above, and ſomewhat rounded beneath. Spike ſmall, ſolitary, terminal, ovate, acute, compoſed of 5 or 6 flowers, whoſe glumes are truly imbricated in every direction, not two-ranked, ſo that it properly belongs to this genus, and by no means, either in character or habit, to *Cyperus*. Each glume is ſharply keeled, pointed; the margin membranous; the 2 lowermoſt are rather the largeſt, and ſometimes barren. Seed elliptical, without any briſtles at the baſe.



MELICA cærulea.

Purple Melic-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, with about 2 flowers, and the rudiment of another between them. *Cor.* of 2 valves.

SPEC. CHAR. Petals acute, beardleſs. Panicle denſe. Flowers erect, cylindrical.

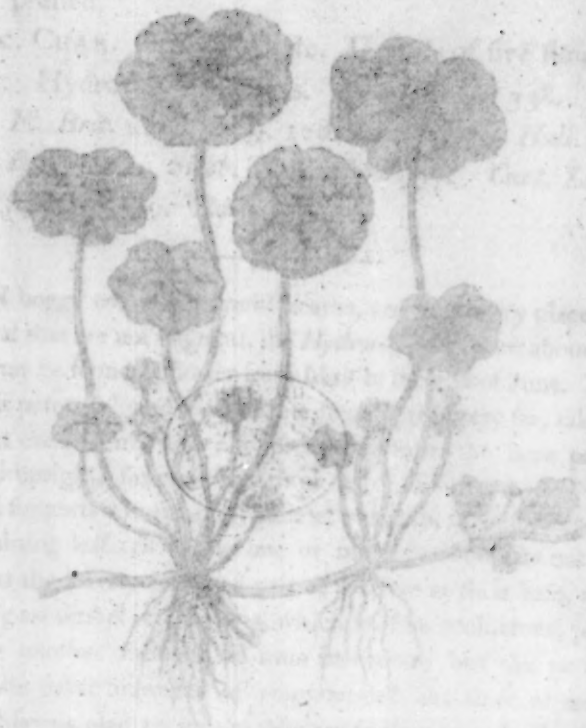
SYN. Melica cærulea. *Linn. Mant.* 2. 325. *Sm. Fl. Brit.* 93. *With.* 139. *Hull.* 21. *Relh.* 32. *Sibth.* 39. *Abbot.* 16. *Curt. Lond. faſc.* 5. *t.* 11.

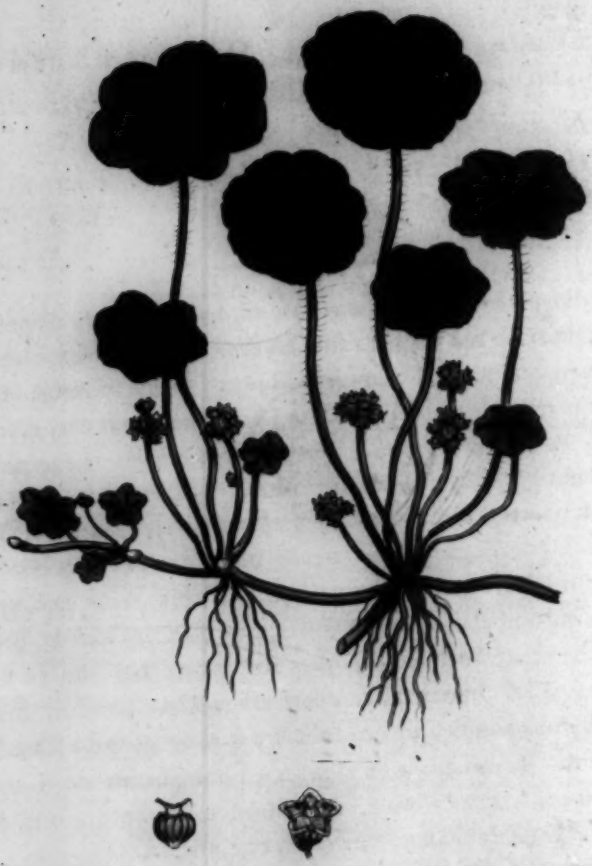
Aira cærulea. *Linn. Sp. Pl.* 95. *Hudſ.* 33.

Gramen pratenſe ſerotinum, paniculâ longâ purpuraſcente. *Raii Syn.* 404.

FREQUENT in the moſt barren ſandy boggy places, eſpecially about pools upon mountainous heaths, flowering in Auguſt, and varying in height from 6 to 18 inches, according to the nouriſhment it meets with.

Root perennial, of many ſtrong fibres. Whole herb harſh, rigid, rather glaucous. Stems with a ſort of bulb at their baſe, and one joint a little above it. Leaves upright, ſharp-pointed, ſtriated, entire, often hairy on the upper ſurface. Stipulæ of a few hairs at the top of the ſheath. Panicle oblong, erect, of a violet hue, branched, but not ſpreading. Flowers erect, ſmooth; their glumes deeply furrowed, beardleſs. Stamina very ſlender. Antheræ and ſtigmas deep purple. One floret is ſeſſile, the other raiſed on a ſtalk, which is generally extended above it, and bears one or two imperfect florets beſides; but this being not always the caſe, Linnæus and others have formerly referred this graſs to *Aira*. In ſhady places the panicle is pale or whitiſh.





HYDROCOTYLE vulgaris.

Marſh Penny-wort. White-rot.

PENTANDRIA Digynia.

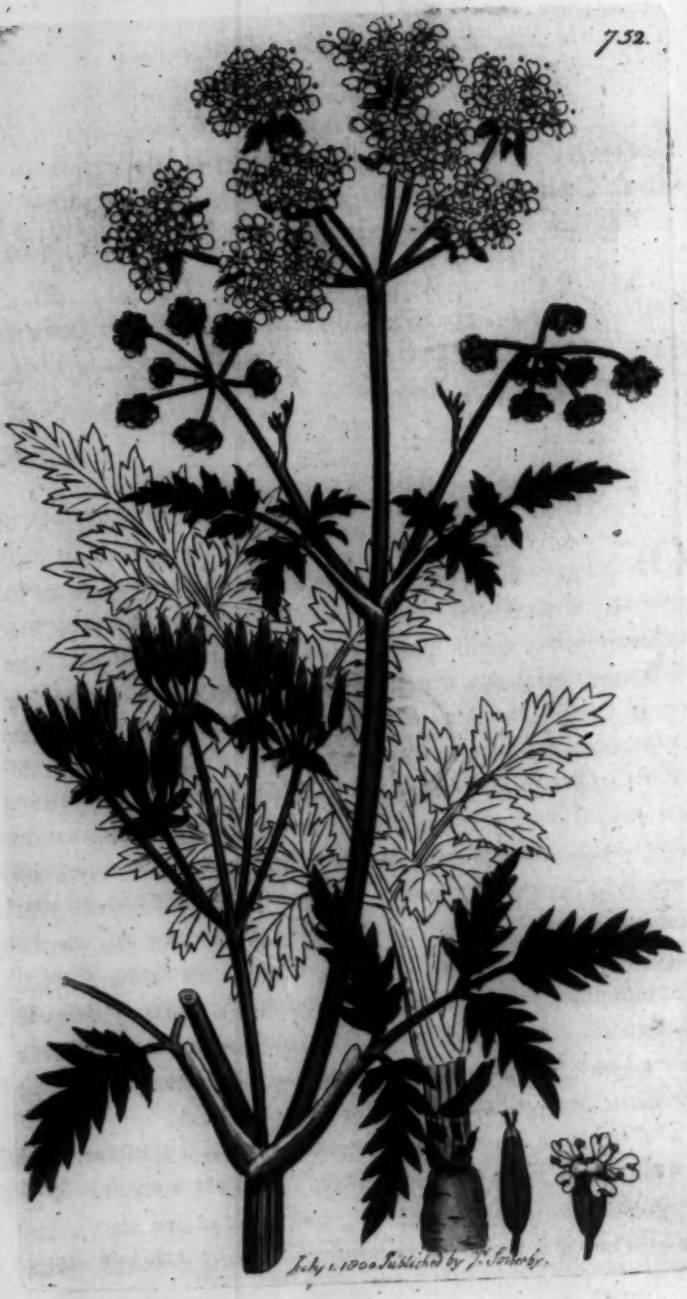
GEN. CHAR. *Umbel* ſimple. *Involucrum* of about 4 leaves. *Petals* undivided. *Fruit* circular, compreſſed.

SPEC. CHAR. Leaves peltate. Umbels of five flowers.

SYN. Hydrocotyle vulgaris. *Linn. Sp. Pl.* 338. *Sm. Fl. Brit.* 290. *Hudſ.* 110. *With.* 284. *Hull.* 58. *Relh.* 107. *Sibth.* 91. *Abbot.* 57. *Curt. Lond. faſc.* 6. *t.* 19. *Raii Syn.* 222.

ON boggy commons, moiſt heaths, and all watery places in general that are not ſtagnant, the *Hydrocotyle vulgaris* abounds, and may be found in flower from May to the end of June. The herb is perennial, and the proſtrate ſtems ſpread very far, taking root at every joint, and alſo producing from the ſame point ſeveral upright, ſimple, ſmooth or hairy, footſtalks, each of which ſupports a horizontal, peltate, roundiſh, crenate, ſmooth and ſhining leaf, as well as one or more flower-ſtalks not ſo high as the leaves, having a pair of bracteæ at their baſe, and bearing an umbel of 5 flowers, which is often proliferous, producing another ſuch umbel from its centre; but the partial ſtalks are never branched or compounded like thoſe of moſt umbelliferous plants; indeed they are ſo ſhort as to be ſcarcely diſcernible. Involucrum of 4 or 5 membranous leaves. Calyx very minute. Petals ovate, ſpreading, undivided, white or reddiſh. Fruit orbicular, furrowed, compreſſed.

The name of White-rot was given from a ſuppoſition that this plant cauſed the diſeaſe in ſheep called the rot; but it is doubtful if they will ever taſte it, and moſt people now attribute that diſeaſe to the animals inhabiting wet paſtures, where indeed the *Hydrocotyle* grows, but which are in ſome other way noxious to their conſtitution.



July 1. 1800. Published by J. Sowerby.

CHÆROPHYLLUM ſylveſtre.

Smooth Cow-parſley.

PENTANDRIA Digynia.

GEN. CHAR. *General Involucre* none; *partial* reflexed, concave. *Petals* heart-ſhaped. *Fruit* oblong, ſmoothiſh.

SPEC. CHAR. Stem ſtriated, ſmooth; ſlightly ſwelling below the joints.

SYN. Chærophyllum ſylveſtre. *Linn. Sp. Pl.* 369. *Sm. Fl. Brit.* 326. *Hudſ.* 124. *With.* 308. *Hull.* 63. *Relh.* 121. *Sibth.* 100. *Abbot.* 66. *Curt. Lond. faſc.* 4. *t.* 25. *Mart. Fl. Ruſt. t.* 96.
Cicutaria vulgaris. *Raii Syn.* 207.

FREQUENT about hedges in the borders of rather fertile paſtures, flowering about the end of April or early in May, being one of our earlieſt umbelliferous plants.

Root perennial, ſpindleſhaped, ſlightly milky, but little branched. Stem about 3 feet high, erect, branched, leafy, round, ſtriated, a little ſwelled below the joints, more eſpecially as the plant advances in age; it is for the moſt part downy towards the bottom, but the upper part is ſleek, and in general (though not always) devoid of pubeſcence. Leaves triply pinnate, the leaflets deeply cut, almoſt ſeſſile, rough at the edge. Umbels when young more or leſs drooping, though commonly leſs ſo than in C. *temulentum*; as the flowers expand they become quite erect. *Involucella* ovate, membranous, fringed with thick-ſet white hairs. Flowers whitiſh; their ſtalks ſmooth. Petals more or leſs notched, rarely entire, a little irregular. Fruit oblong, ſomewhat elliptical, compoſed of 2 nearly cylindrical ſeeds, externally very ſlightly ribbed, and deſtitute of all roughneſs.

The whole herb has a ſweetiſh carrot-like ſmell and taſte, and is eaten by domeſtic cattle. Rabbits are ſaid to be peculiarly fond of it.

The almoſt equally common C. *temulentum* is diſtinguiſhed by its more ſwelling, ſpotted, and very rough ſtem, and briſtly flower-ſtalks.

Pattison published by J.t Sowerby London

GERANIUM dissectum.

Jagged-leaved Crane's-bill.

MONADELPHIA Decandria.

GEN. CHAR. *Cal.* 5-leaved. *Pet.* 5, regular. *Nectary* 5 glands. *Fruit* beaked, separating into 5 capsules, each tipped with a long recurved naked awn.

SPEC. CHAR. Stalks two-flowered. Petals cloven. Leaves in five deep laciniated divisions. Capsules hairy. Seeds dotted.

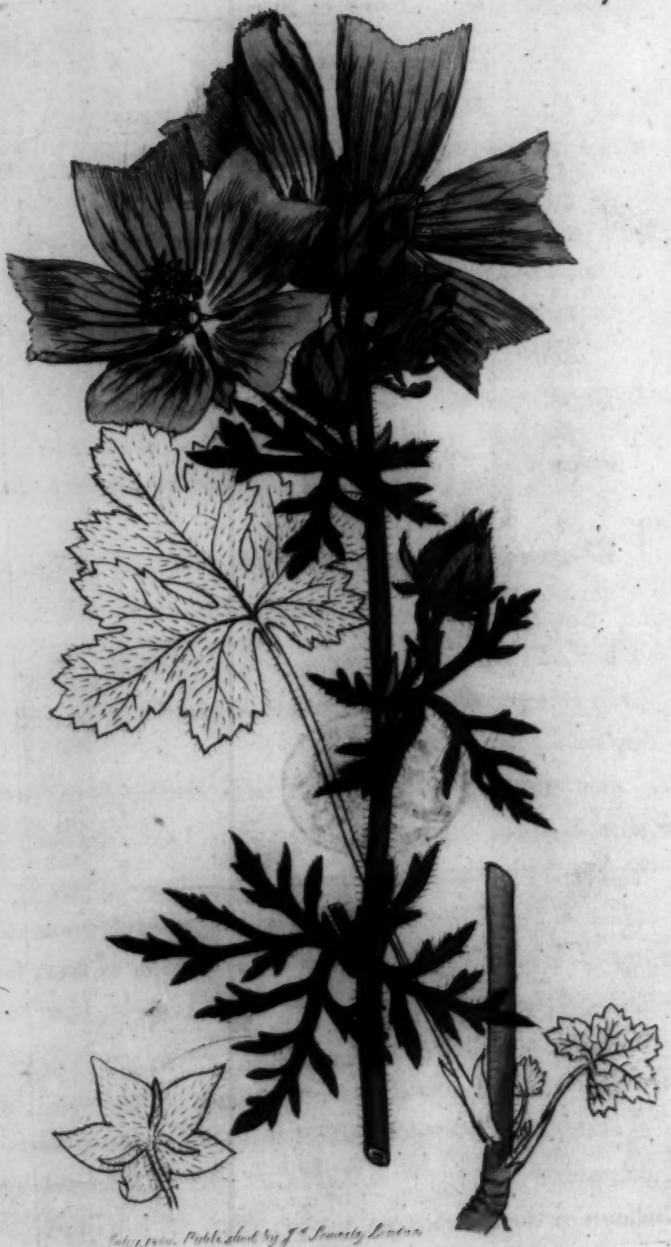
SYN. Geranium dissectum. *Linn. Sp. Pl.* 956. *Sm. Fl. Brit.* 737. *Hudſ.* 304. *With.* 603. *Hull.* 152. *Relh.* 263. *Sibth.* 214. *Abbot.* 150. *Curt. Lond. faſc.* 6. *t.* 45.

G. columbinum majus, dissectis foliis. *Raii Syn.* 359.

A NATIVE of waste ground, hedges and fallow fields, especially on a gravelly soil, flowering in May or June, and continuing for a considerable time.

Root annual. Stems branched, weak and straggling, clothed with short hairs that point downward. Leaves on footstalks, slightly hairy, deeply divided into five principal lobes, each of which is (except in the uppermost leaves) cut into three or more, jagged or entire, narrow lobes. Flower-stalks axillary, short. Calyx beaked, three-nerved. Petals pale crimson, hairy at the base, notched at the summit. Capsules scarcely keeled, brown, a little wrinkled, all over clothed with spreading hairs. Seeds elegantly dotted with minute hollows as in G. *rotundifolium* and *columbinum*, but it is distinguished from the former by its cloven petals and dissected leaves; from the latter by its short flower-stalks and hairy capsules; not to mention differences of habit.

MALVA moschata.



July 1, 1800. Published by J.ª Sowerby London

MALVA moſchata.

Muſk Mallow.

MONADELPHIA Polyandria.

GEN. CHAR. *Cal.* double; the outermoſt of 3 leaves. *Capſules* numerous, circularly arranged. *Seeds* ſolitary.

SPEC. CHAR. Radical leaves kidney-ſhaped, cut; thoſe on the ſtem in five deep pinnatifid and finely divided ſegments. Calyx hairy.

SYN. Malva moſchata. *Linn. Sp. Pl.* 971. *Sm. Fl. Brit.* 742. *Hudſ.* 308. *With.* 613. *Hull.* 155. *Relh.* 266. *Sibth.* 216. *Abbot.* 151. *Curt. Lond. faſc.* 4. *t.* 50.

Alcea tenuifolia criſpa. *Dill. in Raii Syn.* 253.

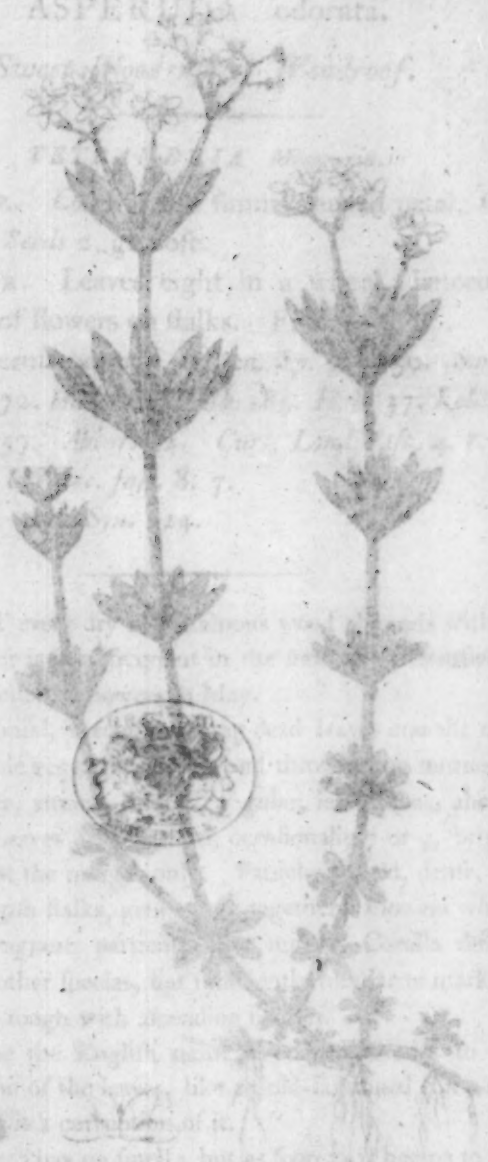
A. vulgaris. *Raii Syn.* 252, the ſynonyms all wrong.

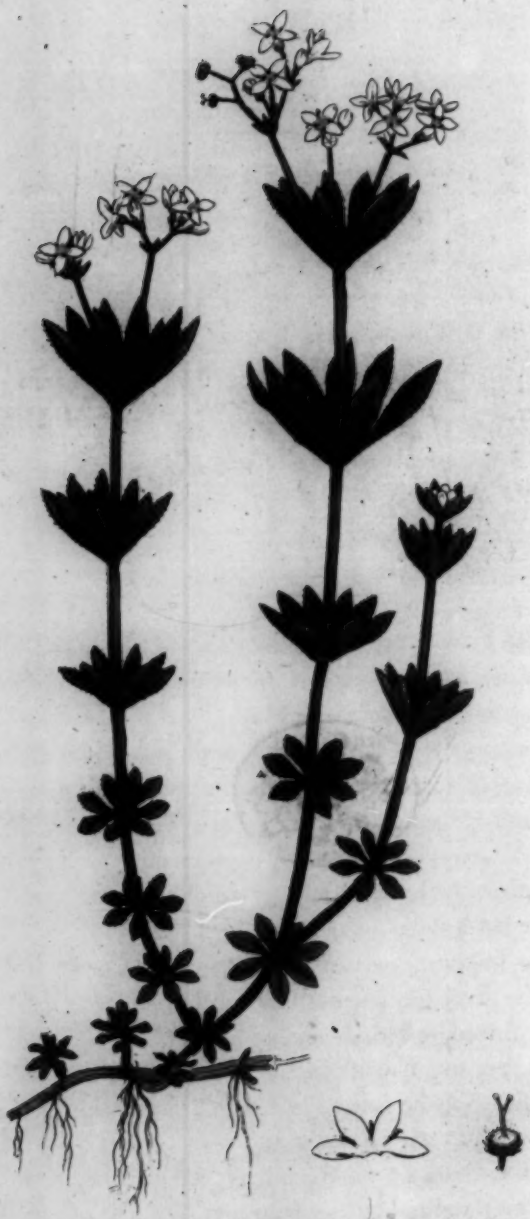
THE graſſy borders of fields and little-frequented roads in gravelly countries are enlivened with the bloſſoms of the beautiful Muſk Mallow during the hot months of Summer and Autumn, and at the ſame time its herbage will be found to diffuſe a ſtrong muſky odour, which is hardly to be perceived in cold or damp weather.

The root is perennial, woody and tough. Stems about two feet high, but little branched, round, rough with rigid hairs. Radical leaves on long footſtalks, kidney-ſhaped, 5-lobed, crenate, ſoon withering away; ſtem-leaves on ſhorter ſtalks, and divided to the baſe into 5 ſegments, which are deeply pinnatifid and cut. Flowers on long axillary ſimple ſtalks, large, roſe-coloured. Ends of the petals abruptly jagged. Calyx hairy, or almoſt briſtly, paler than the leaves.

Ray miſtook this for the *Alcea vulgaris* of J. Bauhin, (*Malva Alcea* Linn.), and inſerted it by that name in his Synopſis. Dillenius in his edition mentions it by its right ſynonym, A. *tenuifolia criſpa* of the ſame author, and copies Bauhin's doubts reſpecting its being really diſtinct from the other. Thus Hudſon introduced both into his Flora, but erroneouſly; for the plants of Ray and Dillenius are both one, and the true M. *Alcea*, as diſtinct a ſpecies as can be, has never been found in England.

ASPERULA odorata.





ASPERULA odorata.

Sweet Woodruff or Woodroof.

TETRANDRIA Monogynia.

GEN. CHAR. *Cor.* of one funnel-ſhaped petal, ſuperior. *Seeds* 2, globoſe.

SPEC. CHAR. Leaves eight in a whorl, lanceolate. Tufts of flowers on ſtalks. Fruit briſtly.

SYN. Aſperula odorata. *Linn. Sp. Pl.* 150. *Sm. Fl. Brit.* 172. *Hudſ.* 66. *With.* 185. *Hull.* 37. *Relh.* 64. *Sibth.* 57. *Abbot.* 32. *Curt. Lond. faſc.* 4. *t.* 15. *Dickſ. H. Sicc. faſc.* 8. 7.

Aſperula. *Raii Syn.* 224.

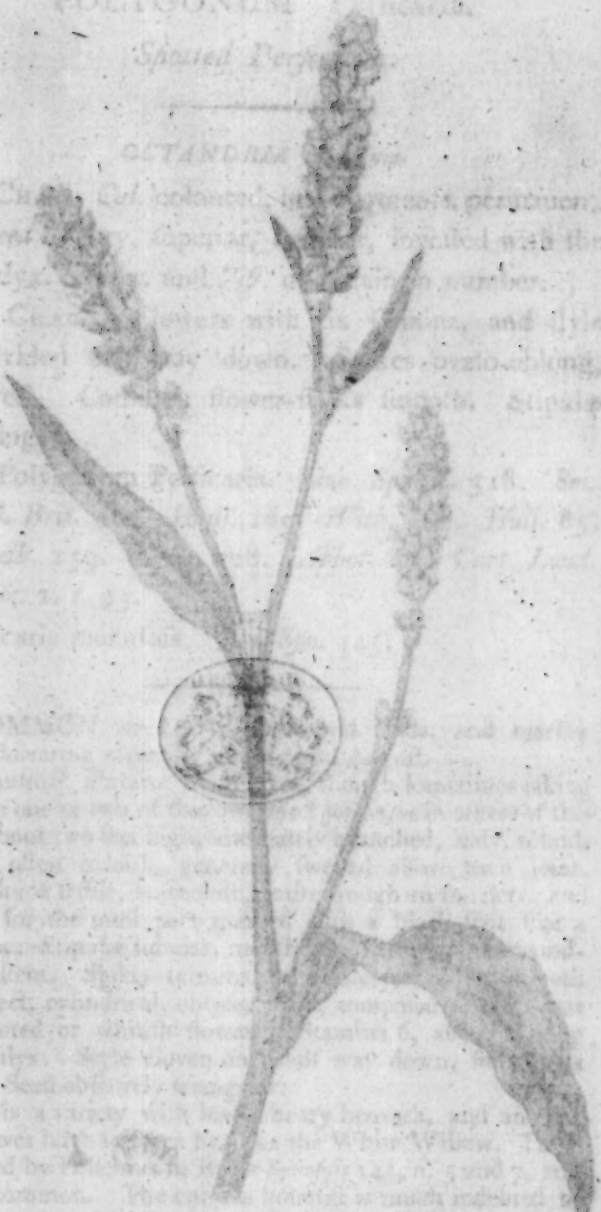
ALMOST every dry mountainous wood abounds with the Woodruff, nor is it unfrequent in the more level counties on a calcareous ſoil. It flowers in May.

Roots perennial, creeping among dead leaves and the more light and friable vegetable mould, and throwing up numerous, upright, ſimple, annual, ſmooth, angular, leafy ſtems, about a ſpan high. Leaves 8 in a whorl, occaſionally 7 or 9, bright-green, rough at the margin only. Panicles forked, denſe, terminal, on longiſh ſtalks, generally 3 together. Flowers white, occaſionally fragrant, particularly at night. Corolla ſhorter than in ſome other ſpecies, but ſufficiently tubular to mark the genus. Fruit rough with aſcending briſtles.

We preſume the Engliſh name Woodruff alludes to the whorled poſition of the leaves, like an old-faſhioned ruff; and that Woodroof is a corruption of it.

The freſh herb has no ſmell; but as ſoon as it begins to dry it exhales a pleaſant and laſting fragrance like that of new hay verging towards the flavour of bitter almonds, to the great ſurpriſe of thoſe who gather it and keep it about them unawares.

The only Britiſh ſpecies of this genus, beſides that here deſcribed, may be found in our 1ſt vol., *t.* 33.



Pub. 1 Feb. 1816 by J.T. Swainby, London.

POLYGONUM Perſicaria.

Spotted Perſicaria.

OCTANDRIA Trigynia.

GEN. CHAR. *Cal.* coloured, in 5 ſegments, permanent. *Seed* ſolitary, ſuperior, angular, inveſted with the calyx. *Stam.* and *Piſt.* uncertain in number.

SPEC. CHAR. Flowers with ſix ſtamina, and ſtyle divided half way down. Spikes ovato-oblong, erect. Common flower-ſtalks ſmooth. Stipulæ fringed.

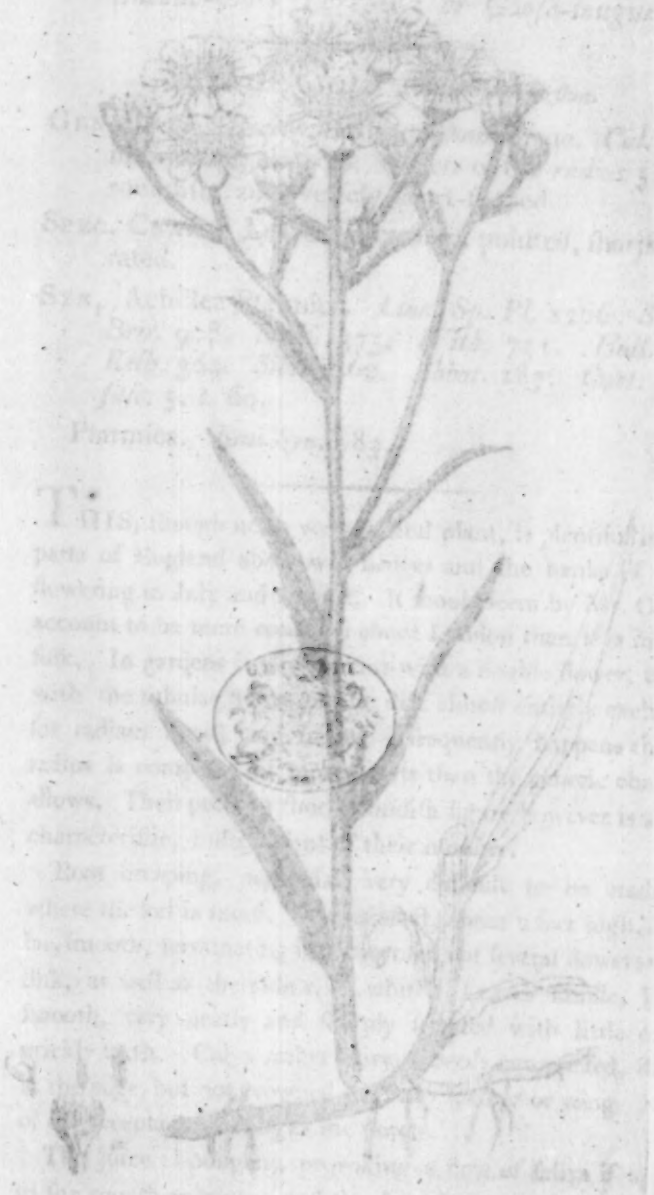
SYN. Polygonum Perſicaria. *Linn. Sp. Pl.* 518. *Sm. Fl. Brit.* 424. *Hudſ.* 169. *With.* 380. *Hull.* 85. *Relh.* 159. *Sibth.* 128. *Abbot.* 88. *Curt. Lond. faſc.* 1. *t.* 23.

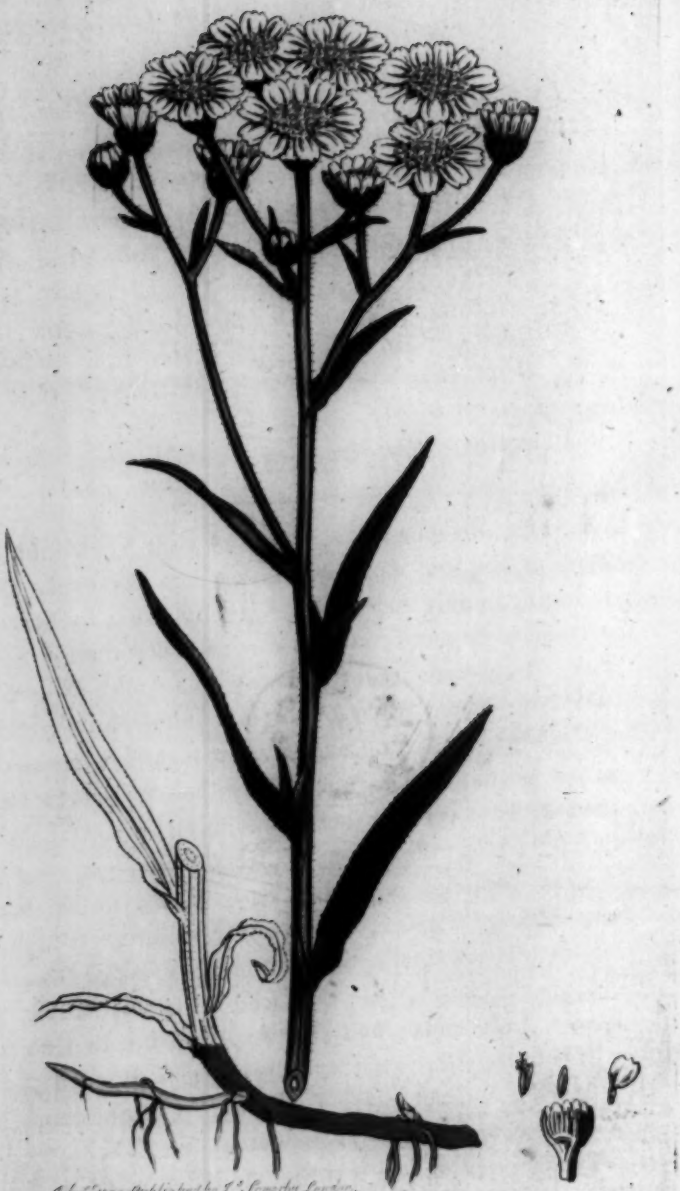
Perſicaria maculoſa. *Raii Syn.* 145.

A COMMON weed in ditches, wet fields, and marſhy places, flowering copiouſly in July and Auguſt.

Root annual, fibrous. Stem erect, though ſometimes taking root from one or two of the lowermoſt joints, as in others of this genus, about two feet high, alternately branched, leafy, round, ſmooth, often reddiſh, generally ſwelled above each joint. Leaves almoſt ſeſſile, lanceolate, entire, rough on the nerve and margin, for the moſt part marked with a black ſpot like a horſe-ſhoe. Stipulæ tubular, membranous, fringed, ſurrounding the ſtem. Spikes terminal or axillary, on long ſmooth ſtalks, erect, cylindrical, obtuſe, denſe, compoſed of numerous roſe-coloured or whitiſh flowers. Stamina 6, about as long as the calyx. Style cloven only half way down, ſometimes 3-cleft. Seed obſcurely triangular.

There is a variety with leaves hoary beneath, and another whoſe leaves have a ſilvery hue like the White Willow. Theſe are noticed by Dillenius in Ray's *Synopſis* 145, *n.* 5 and 7, and are very common. The curious botaniſt is much indebted to the late ingenious Mr. Curtis for aſcertaining the limits between this ſpecies and P. *lapathifolium* (his *penſylvanicum*) whoſe many varieties may always be known by their rough glandular flower-ſtalks, deeply divided ſtyle, and generally beardleſs ſtipulæ.





July 1.st 1802. Published as the Act directs by J.n Sowerby London.

ACHILLEA Ptarmica.

Sneeze-wort Yarrow; or Gooſe-tongue.

SYNGENESIA Polygamia-ſuperflua.

GEN. CHAR. *Recept.* chaffy. *Down* none. *Cal.* ovate, imbricated, unequal. *Florets* of the *radius* 5 to 10, roundiſh, or inverſely heart-ſhaped.

SPEC. CHAR. Leaves lanceolate, pointed, ſharply ſerrated.

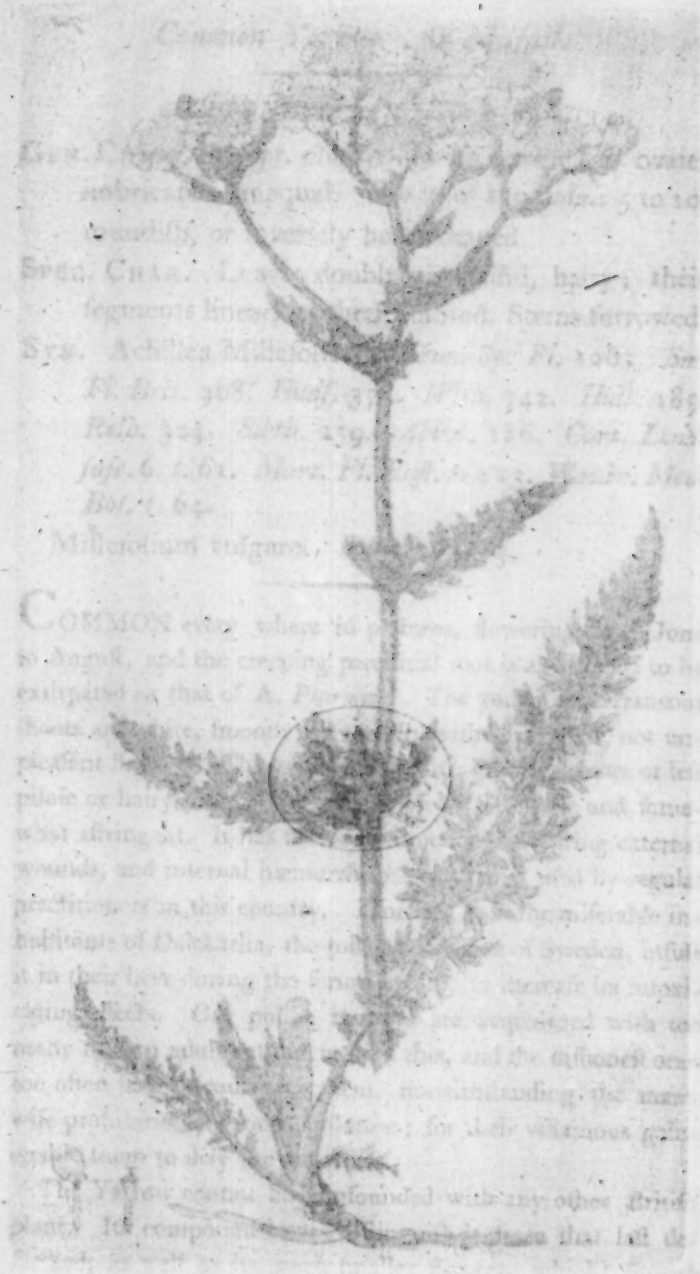
SYN. Achillea Ptarmica. *Linn. Sp. Pl.* 1266. *Sm. Fl. Brit.* 908. *Hudſ.* 375. *With.* 741. *Hull.* 189. *Relh.* 324. *Sibth.* 260. *Abbot.* 187. *Curt. Lond. faſc.* 5. *t.* 60.

Ptarmica. *Raii Syn.* 183.

THIS, though not a very general plant, is plentiful in ſome parts of England about wet hedges and the banks of rivers, flowering in July and Auguſt. It ſhould ſeem by Mr. Curtis's account to be more common about London than it is in Norfolk. In gardens it often occurs with a double flower, that is, with the tubular florets of the diſk almoſt entirely exchanged for radiant ones; and indeed it frequently happens that the radius is compoſed of more florets than the generic character allows. Their peculiar ſhort roundiſh figure however is always characteriſtic, independent of their number.

Root creeping, perennial, very difficult to be eradicated where the ſoil is moiſt. Stems erect, about 2 feet high, angular, ſmooth, terminating in a corymbus of ſeveral flowers whoſe diſk, as well as the radius, is white. Leaves ſimple, linear, ſmooth, very neatly and ſharply ſerrated with little callous prickly teeth. Calyx rather hairy. Seeds compreſſed, dilated at the edge, but not crowned with any feather or wing. Scales of the receptacle as long as the florets.

The juice is pungent, provoking a flow of ſaliva if applied to the mouth or gums; and the dried herb occaſions ſneezing, probably by means of the minute prickles that border the leaves.



ACHILLEA Millefolium.

Common Yarrow; or Milfoil.

SYNGENESIA Polygamia-ſuperflua.

GEN. CHAR. *Recept.* chaffy. *Down* none. *Cal.* ovate, imbricated, unequal. *Florets* of the *radius* 5 to 10, roundiſh, or inverſely heart-ſhaped.

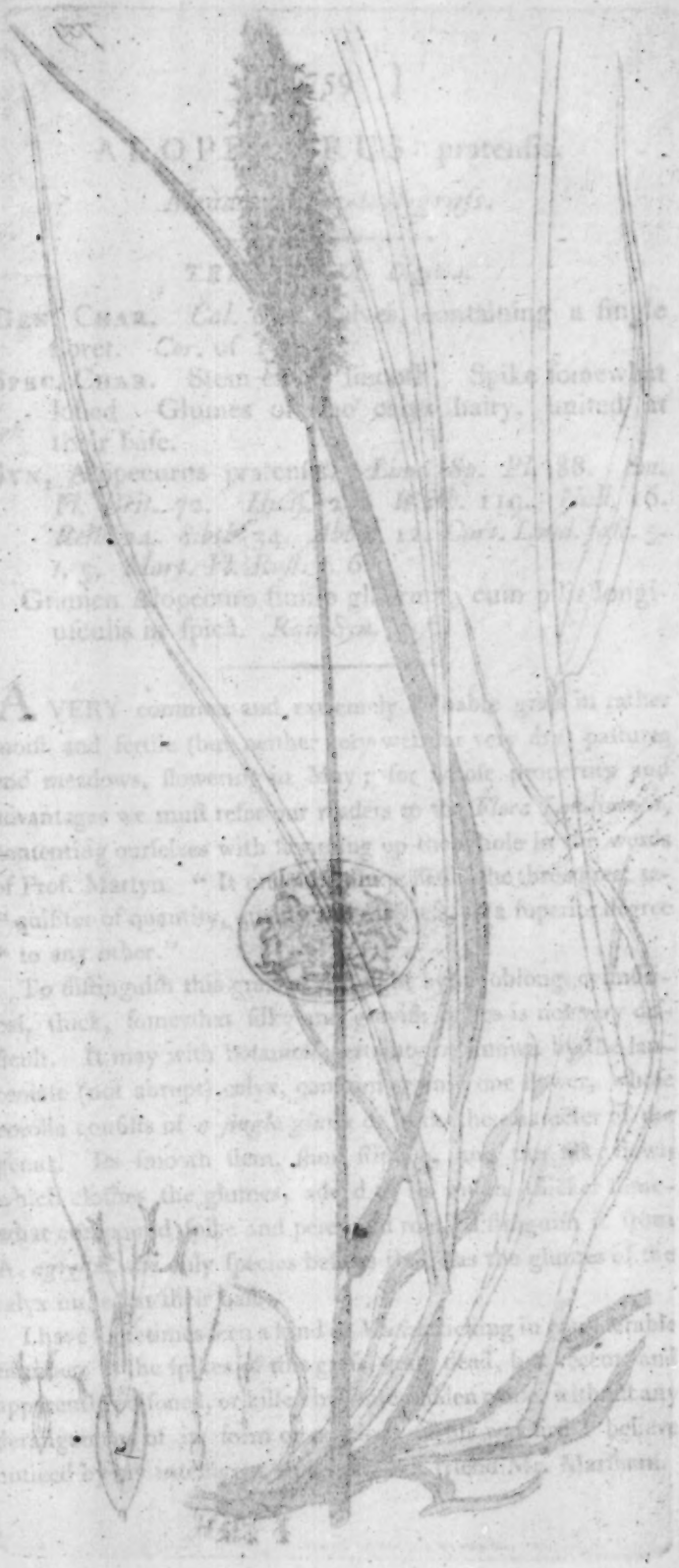
SPEC. CHAR. Leaves doubly pinnatifid, hairy; their ſegments linear, toothed, pointed. Stems furrowed.

SYN. Achillea Millefolium. *Linn. Sp. Pl.* 1267. *Sm. Fl. Brit.* 908. *Hudſ.* 374. *With.* 742. *Hull.* 189. *Relh.* 324. *Sibth.* 259. *Abbot.* 186. *Curt. Lond. faſc.* 6. *t.* 61. *Mart. Fl. Ruſt. t.* 123. *Woodv. Med. Bot. t.* 64.

Millefolium vulgare. *Raii Syn.* 183.

COMMON every where in paſtures, flowering from June to Auguſt, and the creeping perennial root is as difficult to be extirpated as that of A. *Ptarmica*. The young ſubterraneous ſhoots are white, ſmooth and tender, with a pungent, not unpleaſant flavour. The whole herb above-ground is more or leſs piloſe or hairy, and when bruiſed proves aromatic and ſomewhat aſtringent. It has been recommended for curing external wounds, and internal hæmorrhages, but is not uſed by regular practitioners in this country. Linnæus ſays, the miſerable inhabitants of Dalekarlia, the mining province of Sweden, infuſe it in their beer during the fermentation, to increaſe its intoxicating effects. Our public brewers are acquainted with too many foreign adulterations to need this, and the diſhoneſt ones too often have recourſe to them, notwithſtanding the many wiſe prohibitions of our legiſlature; for their villainous gains enable them to defy the penalties.

The Yarrow cannot be confounded with any other Britiſh plant. Its compound leaves diſtinguiſh it from that laſt deſcribed, as well as its much ſmaller flowers, which, though generally white, often have a reddiſh or even purple radius, and become not unornamental.



ALOPECURUS pratenſis.

Meadow Fox-tail-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, containing a ſingle floret. *Cor.* of 1 valve.

SPEC. CHAR. Stem erect, ſmooth. Spike ſomewhat lobed. Glumes of the calyx hairy, united at their baſe.

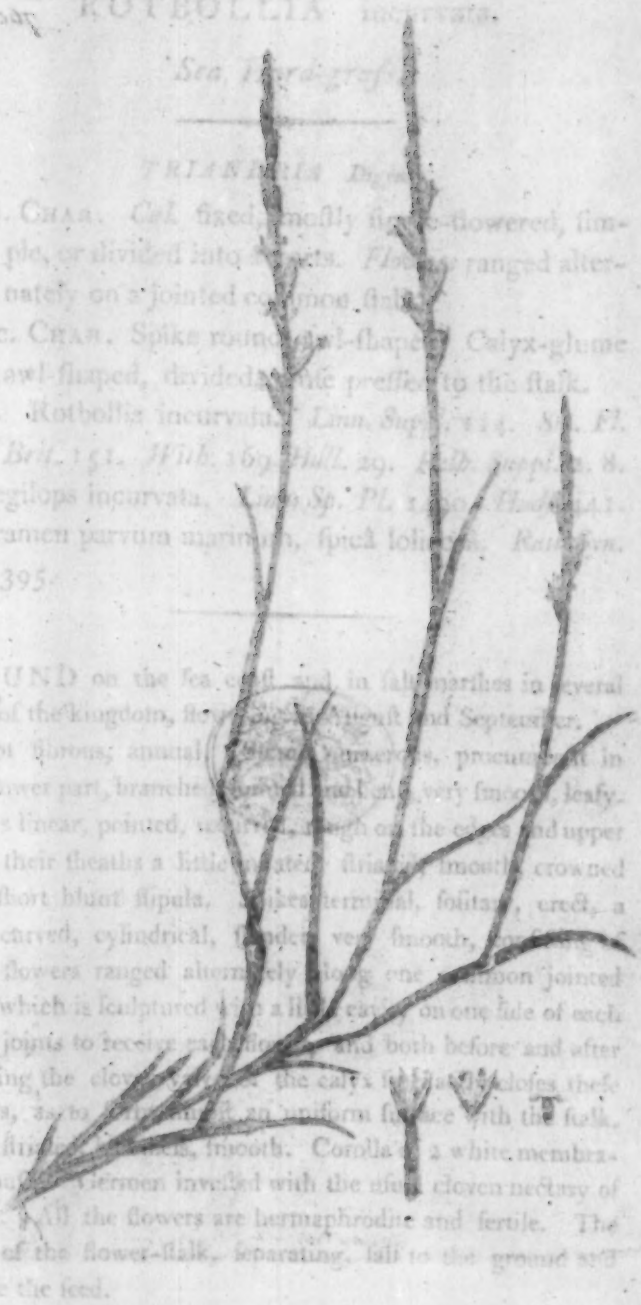
SYN. Alopecurus pratenſis. *Linn. Sp. Pl.* 88. *Sm. Fl. Brit.* 72. *Hudſ.* 27. *With.* 119. *Hull.* 16. *Relh.* 24. *Sibth.* 34. *Abbot.* 12. *Curt. Lond. faſc.* 5. *t.* 5. *Mart. Fl. Ruſt. t.* 6.

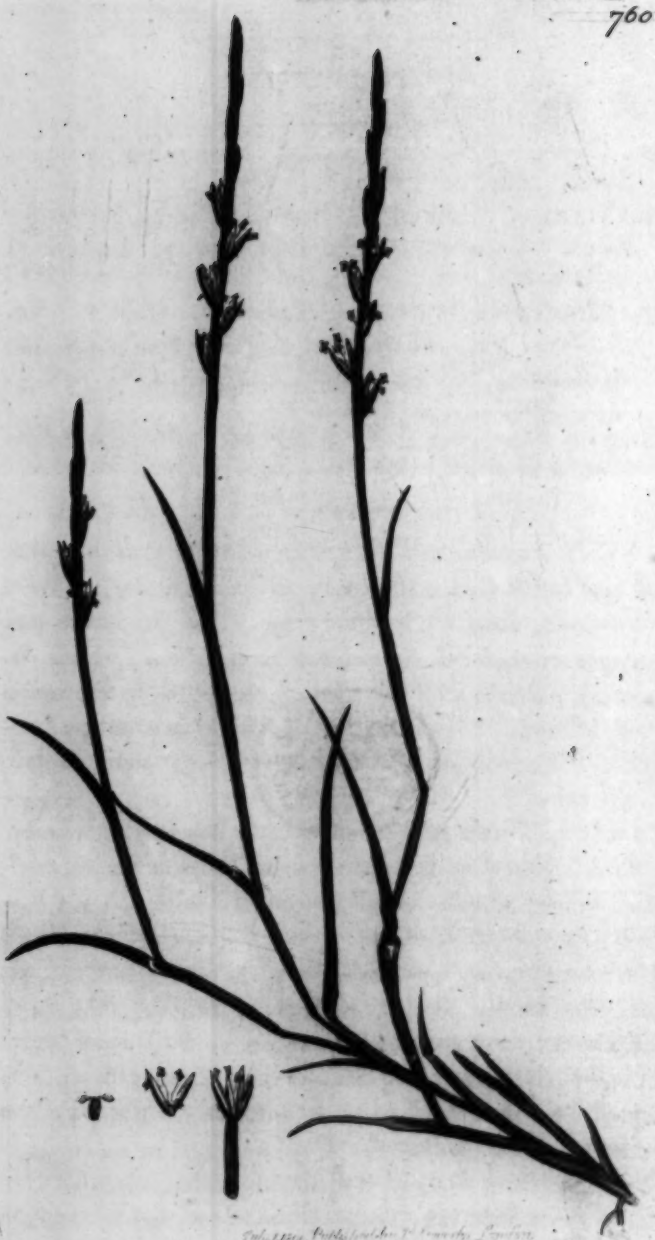
Gramen Alopecuro ſimile glabrum, cum pilis longiuſculis in ſpicâ. *Raii Syn.* 396.

A VERY common and extremely valuable graſs in rather moiſt and fertile (but neither very wet nor very dry) paſtures and meadows, flowering in May; for whoſe properties and advantages we muſt refer our readers to the *Flora Londinenſis*, contenting ourſelves with ſumming up the whole in the words of Prof. Martyn. "It undoubtedly poſſeſſes the three great re-"quiſites of quantity, quality and earlineſs, in a ſuperior degree "to any other."

To diſtinguiſh this graſs at firſt ſight by its oblong, cylindrical, thick, ſomewhat filky and grayiſh ſpikes is not very difficult. It may with botanical certainty be known by the lanceolate (not abrupt) calyx, containing only one flower, whoſe corolla conſiſts of *a ſingle glume* or huſk, the character of the genus. Its ſmooth ſtem, ſhort ſtipulæ, and the filky down which clothes the glumes, added to its much thicker ſomewhat compound ſpike and perennial root, diſtinguiſh it from A. *agreſtis*, the only ſpecies beſides that has the glumes of the calyx united at their baſe.

I have ſometimes ſeen a kind of *Muſca* ſticking in conſiderable numbers to the ſpikes of this graſs, quite dead, but recent, and apparently poiſoned, or killed by ſome ſudden cauſe, without any derangement of its form or poſition. This was firſt I believe noticed by my intelligent entomological friend Mr. Marſham.





ROTBOLLIA incurvata.

Sea Hard-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* fixed, moſtly ſingle-flowered, ſimple, or divided into 2 parts. *Flowers* ranged alternately on a jointed common ſtalk.

SPEC. CHAR. Spike round, awl-ſhaped. Calyx-glume awl-ſhaped, divided, cloſe preſſed to the ſtalk.

SYN. Rotbollia incurvata. *Linn. Suppl.* 114. *Sm. Fl. Brit.* 151. *With.* 169. *Hull.* 29. *Relh. Suppl.* 2. 8. Aegilops incurvata. *Linn. Sp. Pl.* 1490. *Hudſ.* 441. Gramen parvum marinum, ſpicâ loliaceâ. *Raii Syn.* 395.

FOUND on the ſea coaſt and in ſalt marſhes in ſeveral parts of the kingdom, flowering in Auguſt and September.

Root fibrous, annual. Stems numerous, procumbent in their lower part, branched, jointed and bent, very ſmooth, leafy. Leaves linear, pointed, recurved, rough on the edges and upper ſide; their ſheaths a little inflated, ſtriated, ſmooth, crowned by a ſhort blunt ſtipula. Spikes terminal, ſolitary, erect, a little curved, cylindrical, ſlender, very ſmooth, conſiſting of many flowers ranged alternately along one common jointed ſtalk, which is ſculptured with a little cavity on one ſide of each of its joints to receive each flower, and both before and after flowering the cloven valve of the calyx ſo exactly cloſes theſe cavities, as to form almoſt an uniform ſurface with the ſtalk. Calyx ſtriated, beardleſs, ſmooth. Corolla of 2 white membranous huſks. Germen inveſted with the uſual cloven nectary of graſſes. All the flowers are hermaphrodite and fertile. The joints of the flower-ſtalk, ſeparating, fall to the ground and diſperſe the ſeed.

No agricultural uſe is attributed to this graſs.

LYSIMACHIA vulgaris.

Yellow Loosestrife.

Published by J. Sowerby

LYSIMACHIA vulgaris.

Yellow Looſeſtrife.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* wheel-ſhaped. *Capſ.* globoſe, pointed, with 10 valves.

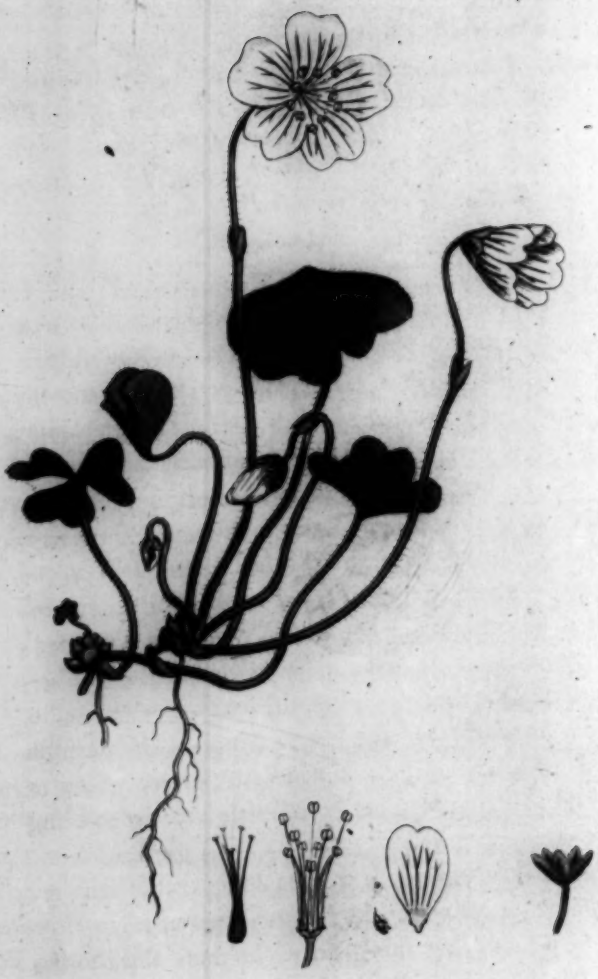
SPEC. CHAR. Panicled. Cluſters terminal. Leaves ovato-lanceolate, acute.

SYN. Lyſimachia vulgaris. *Linn. Sp. Pl.* 209. *Sm. Fl. Brit.* 227. *Hudſ.* 86. *With.* 237. *Hull.* 49. *Relh.* 84. *Sibth.* 74. *Abbot.* 45. *Curt. Lond. faſc.* 5. *t.* 19.
L. lutea. *Raii Syn.* 282.

AN elegant ornament of watery ſhady places, and the reedy banks of rivers, where it intermingles with the Common Valerian, the *Eupatorium*, the *Lythrum Salicaria*, &c. but is much leſs common than any of them. It flowers in July, and, having a perennial creeping root, may be eaſily propagated in a garden, even where the ſoil is not very wet. In a moiſt one it would ſoon become a troubleſome weed.

The ſtems riſe to the height of 3 feet or more, and are ſtraight, leafy, panicled at the top. The leaves, though generally oppoſite only, very often grow 3 or 4 in a whorl, almoſt ſeſſile, of a broad lanceolate form, entire, veiny, frequently downy beneath. Cluſters from the boſoms of the uppermoſt leaves, joining to form a panicle of large handſome yellow flowers. Each partial flower-ſtalk has an awl-ſhaped bractea at its baſe. The diviſions of the calyx are pointed and fringed. Corolla ſpreading, divided almoſt to the baſe. Stamina ſmooth, united at the bottom, ſo as to be perfectly monadelphous. Seeds numerous and ſmall, not always perfected.

It ſeems moſt probable that this herb received its Greek name in honour of Lyſimachus, (as *Gentiana* and *Euphorbia* are ancient names of ſimilar origin,) and that Looſeſtrife is merely a tranſlation of it. The fable of the plant taming enraged animals, was probably, like many others, the invention of ſome perſon of more learning than wiſdom.



July 1 1800. Published as the Act directs by Jas Sowerby London.

OXALIS Acetoſella.

Common Wood-Sorrel.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, connected by their claws. *Capſ.* ſuperior, of 5 cells, 5-ſided, burſting at the angles. *Seeds* clothed with an elaſtic tunic.

SPEC. CHAR. Stalk ſingle-flowered. Leaves ternate, inverſely heart-ſhaped, hairy. Root of ſcaly joints.

SYN. Oxalis Acetoſella. *Linn. Sp. Pl.* 620. *Sm. Fl. Brit.* 491. *Hudſ.* 198. *With.* 430. *Hull.* 100. *Relh.* 176. *Sibth.* 144. *Abbot.* 100. *Curt. Lond. faſc.* 2. *t.* 31. *Woodv. Med. Bot. t.* 20.

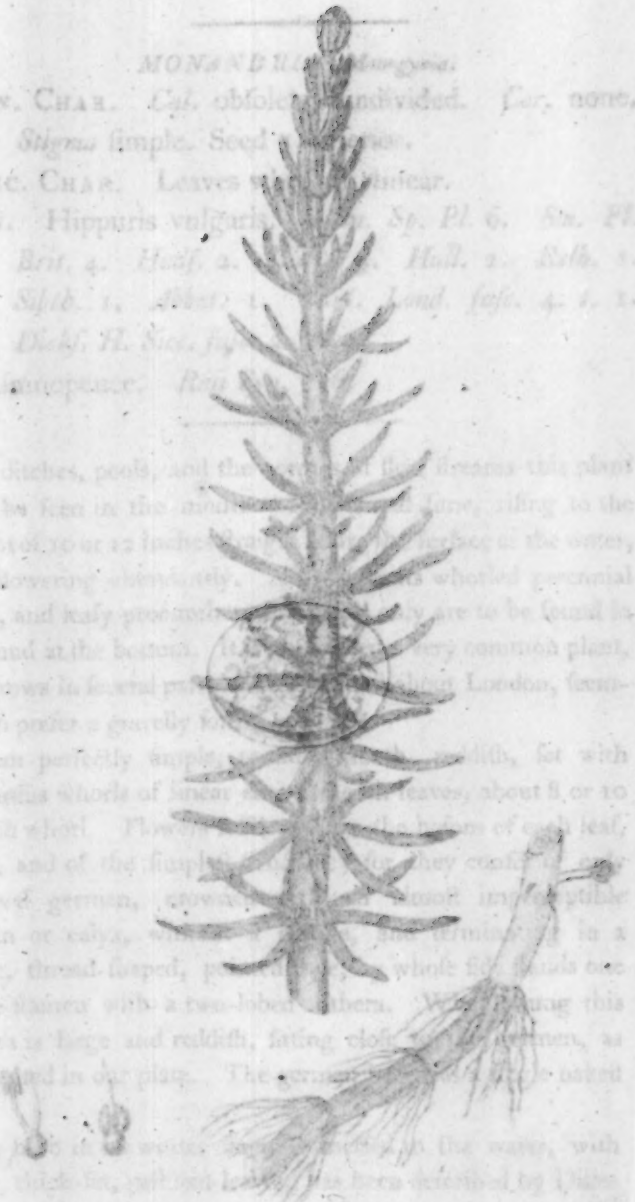
Oxys alba. *Raii Syn.* * 281.

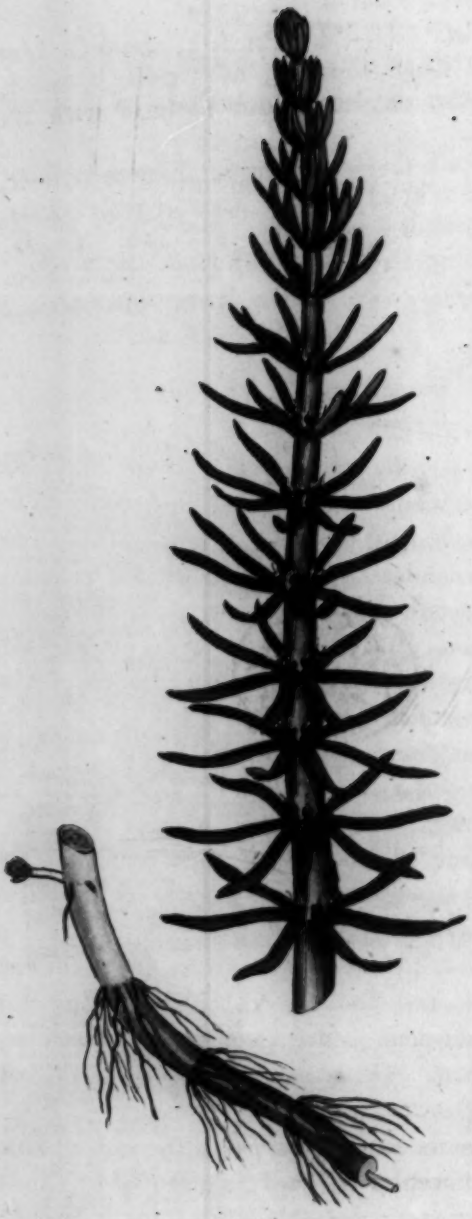
GROVES and thickets in the ſpring abound with this pretty plant, whoſe delicate drooping bloſſoms do not indeed obtrude themſelves upon the notice of every paſſenger, being generally ſhaded by buſhes, or concealed by the herbage of other plants; but when obſerved they cannot fail to be admired, eſpecially if contraſted with the bright verdure of their proper foliage. They are produced in April or May. Later in the ſummer the capſules are found darting forth their little ſhining ſeeds on the ſlighteſt touch, by means of the elaſtic *arillus* that contains them.

The root is perennial, and conſiſts of numerous fleſhy reddiſh ſcales. Stem none. Leaves on long ſtalks, three together, inverſely heartſhaped, drooping at night, very acid to the taſte, often purpliſh beneath. Flowers on a ſimple hairy purpliſh ſtalk. Petals white, beautifully veined with purple, yellow at their baſe, and adhering together by a little glandular ſwelling on each ſide.

The leaves are beaten with ſugar into an agreeably acid refreſhing conſerve, partaking of the flavour of green tea.

I cannot help ſuſpecting this genus to be more allied to the *Rutaceæ* of M. de Juſſieu than to his *Gerania*. Many of the former, lately diſcovered in New Holland, have acid purpliſh leaves. The *arillus* however is the moſt important point of agreement which firſt led me to this ſuſpicion.





HIPPURIS vulgaris.

Mare's-tail.

MONANDRIA Monogynia.

GEN. CHAR. *Cal.* obſolete, undivided. *Cor.* none. *Stigma* ſimple. Seed 1, inferior.

SPEC. CHAR. Leaves whorled, linear.

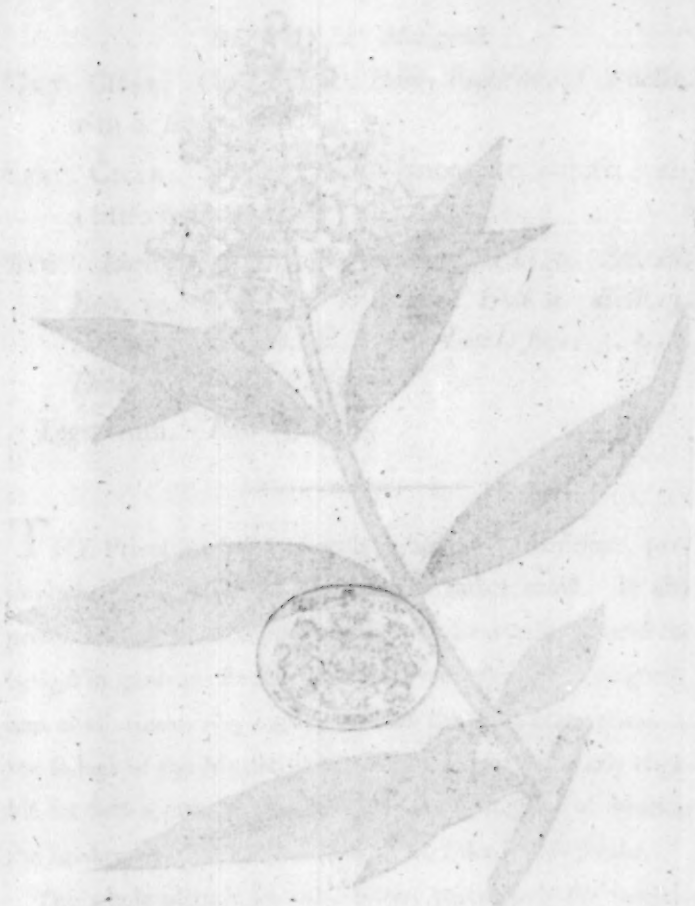
SYN. Hippuris vulgaris. *Linn. Sp. Pl.* 6. *Sm. Fl. Brit.* 4. *Hudſ.* 2. *With.* 5. *Hull.* 2. *Relh.* 1. *Sibth.* 1. *Abbot.* 1. *Curt. Lond. faſc.* 4. *t.* 1. *Dickſ. H. Sicc. faſc.* 2. 1.

Limnopeuce. *Raii Syn.* 136.

IN ditches, pools, and the borders of ſlow ſtreams this plant may be ſeen in the months of May and June, riſing to the height of 10 or 12 inches ſtraight above the ſurface of the water, and flowering abundantly. Afterwards its whorled perennial roots, and leafy procumbent branches, only are to be found in the mud at the bottom. It is not indeed a very common plant, but grows in ſeveral parts of Norfolk and about London, ſeeming to prefer a gravelly ſoil.

Stem perfectly ſimple, round, ſmooth, reddiſh, ſet with numerous whorls of linear entire ſmooth leaves, about 8 or 10 in each whorl. Flowers ſeſſile, one in the boſom of each leaf, ſmall, and of the ſimpleſt ſtructure; for they conſiſt of only an oval germen, crowned with an almoſt imperceptible margin or calyx, without a corolla, and terminating in a ſimple, thread-ſhaped, pointed ſtyle, by whoſe ſide ſtands one ſimple ſtamen with a two-lobed anthera. When young this anthera is large and reddiſh, ſitting cloſe to the germen, as repreſented in our plate. The germen becomes a ſingle naked ſeed.

The herb in its winter ſtate, immerſed in the water, with longer, thick-ſet, pellucid leaves, has been deſcribed by Dillenius in Ray's *Synopſis* as a remarkable variety; but it depends entirely on the time of the year, and is therefore not to be deemed a variety.



LIGUSTRUM vulgare.

Privet.

DIANDRIA Monogynia.

GEN. CHAR. *Cor.* 4-cleft. *Berry* ſuperior, of 2 cells, with 2 *ſeeds* in each.

SPEC. CHAR. Leaves elliptic-lanceolate, obtuſe, with a little point.

SYN. Liguſtrum vulgare. *Linn. Sp. Pl.* 10. *Sm. Fl. Brit.* 12. *Hudſ.* 3. *With.* 10. *Hull.* 4. *Relh.* 3. *Sibth.* 4. *Abbot.* 2. *Curt. Lond. faſc.* 5. *t.* 1. *Dickſ. H. Sicc. faſc.* 13. 2.

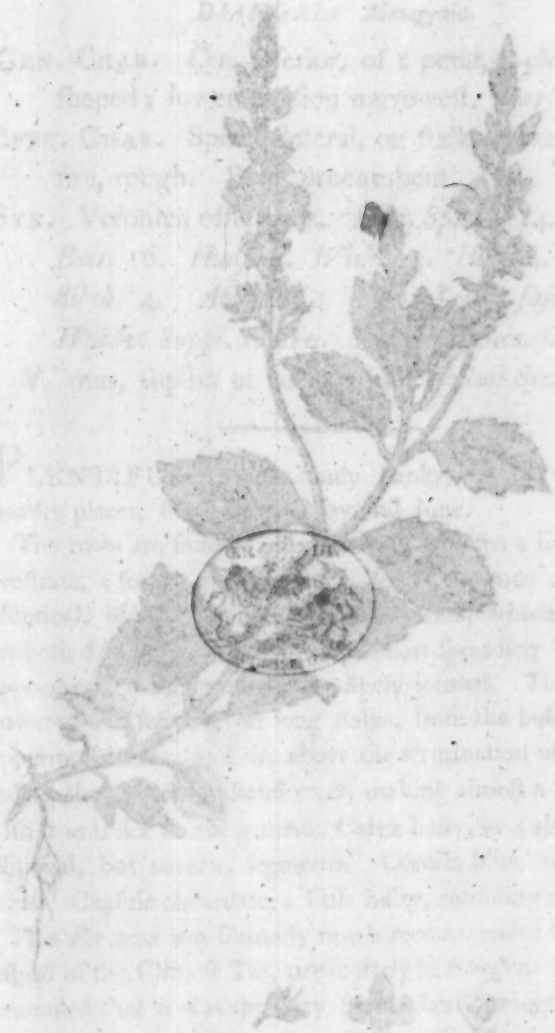
Liguſtrum. *Raii Syn.* 465.

THE Privet is often met with in hedges and thickets, particularly where the ſoil is gravelly and rather moiſt. It alſo grows in chalky ſituations; and is very frequently planted for hedges in gardens: for, being in mild winters almoſt evergreen, and at all times very hardy, and having ſome reſemblance to the foliage of the Myrtle, it has been thought peculiarly eligible for ſuch a purpoſe. It has alſo the advantage of bearing the ſmoke, even of London itſelf, better than moſt ſhrubs.

The whole plant is ſmooth, bitter, particularly the berries. Leaves oppoſite, nearly ſeſſile, entire, various in breadth, more or leſs obtuſe, but tipped with a minute point. Flowers produced early in June, white, with a ſtrong unpleaſant ſmell, and growing in denſe terminal panicles. The corolla turns brown before it falls. In ſome others of the ſame natural order, the *Jaſmineæ*, it aſſumes a purple hue. Berries purpliſh black, with 4 ſeeds encloſed in a mealy pulp.

LIGUSTRUM. *vulgare.*

Privet.



June 1, 1790. Published by J. Sowerby, London.

VERONICA officinalis.

Common Speedwell.

DIANDRIA Monogynia.

GEN. CHAR. *Cor.* inferior, of 1 petal, 4-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſ.* 2-celled.

SPEC. CHAR. Spikes lateral, on ſtalks. Leaves oppoſite, rough. Stem procumbent.

SYN. Veronica officinalis. *Linn. Sp. Pl.* 14. *Sm. Fl. Brit.* 16. *Hudſ.* 4. *With.* 13. *Hull.* 4. *Relh.* 4. *Sibth.* 4. *Abbot.* 2. *Curt. Lond. faſc.* 3. *t.* 1. *Woodv. Suppl. t.* 219. *Dickſ. H. Sicc. faſc.* 13. 3. V. mas, ſupina et vulgatiſſima. *Raii Syn.* 281.

PLENTIFUL on dry ſandy banks, or in woods and heathy places, flowering in May and June.

The roots are fibrous and perennial. Stems a little woody, proſtrate, a foot or more in length, ſet with numerous, oppoſite, elliptical, blunt or pointed, ſerrated leaves, which are rough on both ſides, like the ſtem, with ſhort ſpreading hairs, that appear under a magnifier to be finely jointed. The ſpikes of flowers ſtand ſolitary, on long ſtalks, from the boſoms of the uppermoſt leaves, and riſe above the termination of the ſtem; indeed they generally ſtand erect, making almoſt a right angle with it as it lies on the ground. Calyx hairy, in 4 almoſt equal, elliptical, but narrow, ſegments. Corolla blue, with darker veins. Capſule obcordate, a little hairy, conſiſting of 2 valves.

This *Veronica* was formerly much recommended to be uſed inſtead of the Chineſe Tea, particularly in Sweden. Some have contended that it was the very ſame plant, brought with ſo much trouble and expence from China. Thoſe who adulterate tea, however, know better than to mix any of this herb with it, whoſe appearance and flavour would ſoon betray it to our more refined taſtes. It is aſtringent, with ſome degree of acrimony, and a rather unpleaſant bitter.

Aug.st 1. 1800. Published by J. Sowerby, London.

VERONICA montana.

Mountain Speedwell.

DIANDRIA Monogynia.

GEN. CHAR. *Cor.* inferior, of 1 petal, 4-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſ.* 2-celled.

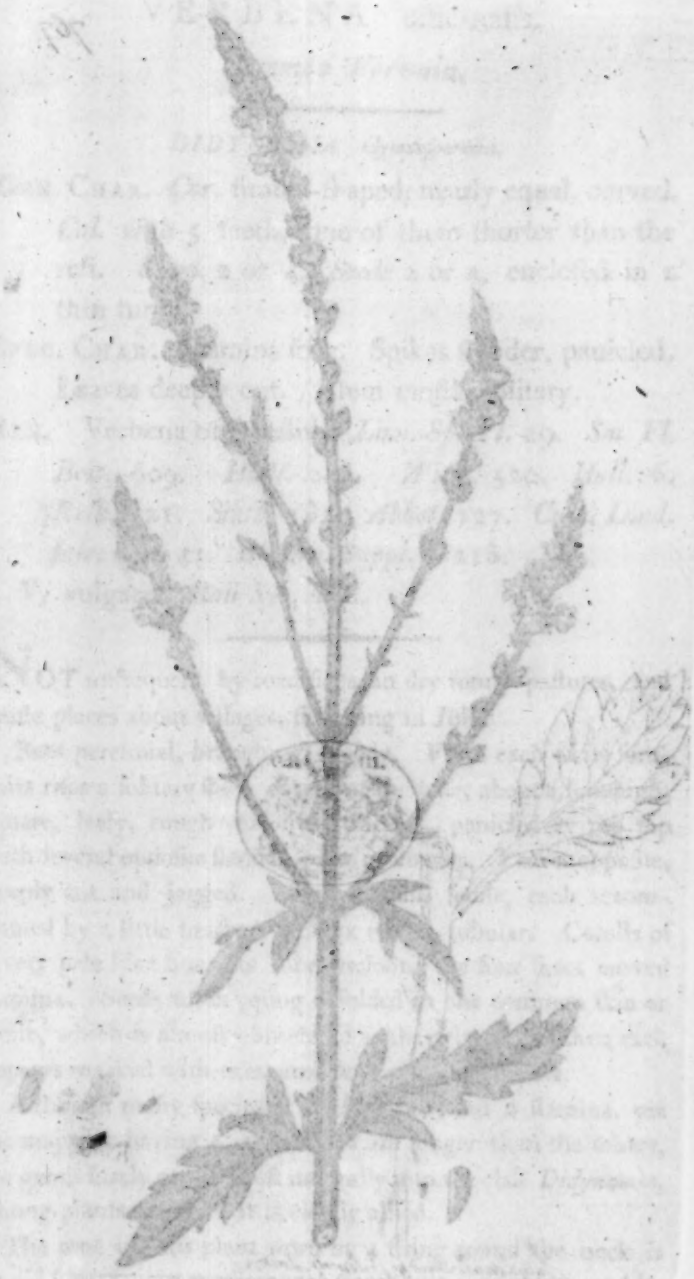
SPEC. CHAR. Cluſters lateral, elongated, ſlender, of few flowers. Leaves ovate, ſerrated, on foot-ſtalks. Stem hairy in every direction.

SYN. Veronica montana. *Linn. Sp. Pl.* 17. *Sm. Fl. Brit.* 21. *Hudſ.* 6. *With.* 16. *Hull.* 5. *Relh.* 7. *Sibth.* 6. *Abbot.* 4. *Curt. Lond. faſc.* 4. *t.* 2.

V. chamædryoides, foliis pediculis oblongis inſidentibus. *Raii Syn.* 281.

MR. SOWERBY gathered this ſpecimen in Charlton wood, where Sherard is firſt recorded to have found the V. *montana*, and where it ſtill grows copiouſly. Nor is it very rare in other parts of England, in ſhady and rather moiſt woods, particularly on a chalky ſoil, flowering in May and June. The root is perennial.

Many botaniſts have thought this merely a variety of V. *Chamædrys*, ſee our *t.* 623; but ſuch an idea can have ariſen, as Mr. Curtis obſerves, only from a very ſuperficial inquiry. In the firſt place, the hairineſs of the ſtem being general, and not confined to two longitudinal lines, is its very ſufficient diſtinction; to this may be added the ſtalked leaves, which are thinner and more ſhining than thoſe of the *Chamædrys*; the corolla is much ſmaller and leſs beautiful; laſtly, the capſule is thrice as large as in that ſpecies, more compreſſed and dilated, and formed as it were of two orbicular portions joined together, inſtead of being heart-ſhaped.



July 1. 1800. Published by J. Sowerby, London.

VERBENA officinalis.

Common Vervain.

DIDYNAMIA Gymnoſpermia.

GEN. CHAR. *Cor.* funnel-ſhaped, nearly equal, curved. *Cal.* with 5 teeth, one of them ſhorter than the reſt. *Stam.* 2 or 4. *Seeds* 2 or 4, encloſed in a thin tunic.

SPEC. CHAR. Stamina four. Spikes ſlender, panicled. Leaves deeply cut. Stem moſtly ſolitary.

SYN. Verbena officinalis. *Linn. Sp. Pl.* 29. *Sm. Fl. Brit.* 609. *Hudſ.* 249. *With.* 520. *Hull.* 6. *Relh.* 221. *Sibth.* 181. *Abbot.* 127. *Curt. Lond. faſc.* 1. *t.* 41. *Woodv. Suppl. t.* 218.

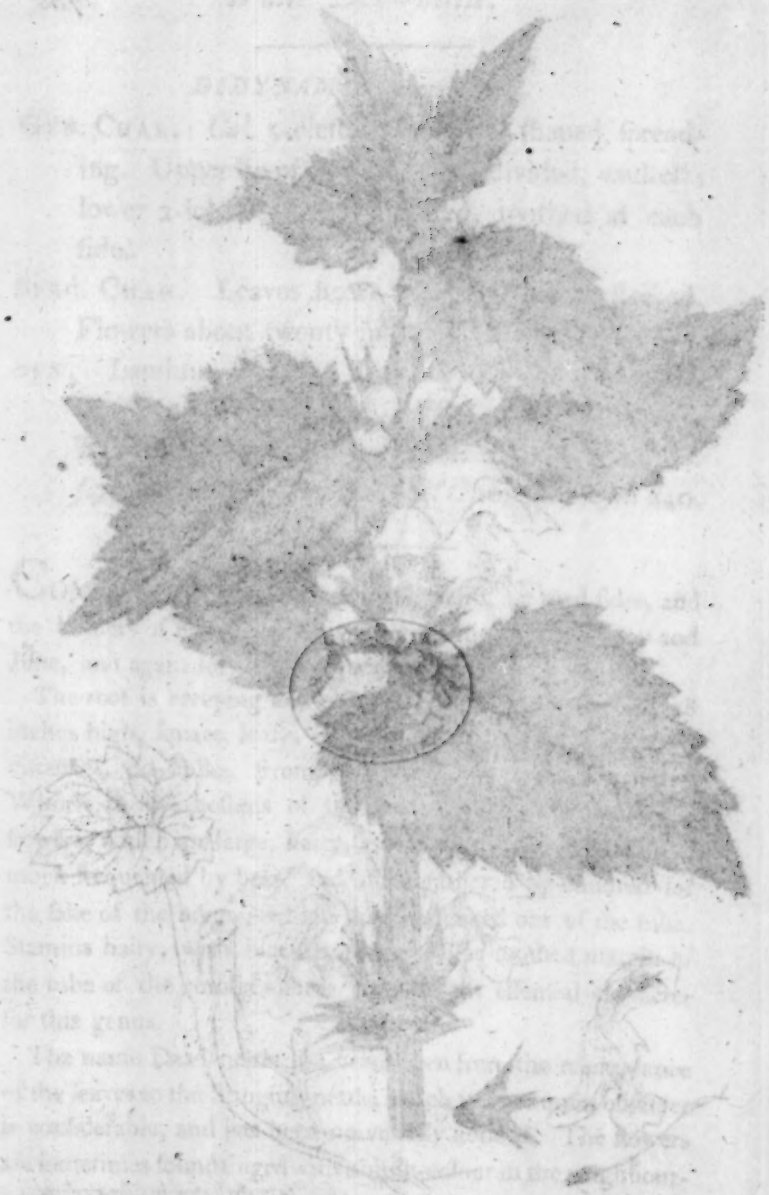
V. vulgaris. *Raii Syn.* 236.

NOT unfrequent by road ſides, in dry ſunny paſtures, and waſte places about villages, flowering in July.

Root perennial, branching, woody. From each of its ſummits riſes a ſolitary ſtem, curved at the baſe, about a foot high, ſquare, leafy, rough with little prickles, panicled at the top with ſeveral oppoſite ſlender ſpikes of flowers. Leaves oppoſite, deeply cut and jagged. Flowers ſmall, ſeſſile, each accompanied by a little bractea. Calyx rough, tubular. Corolla of a very pale lilac hue, its tube encloſing the four ſhort curved ſtamina. Seeds when young enfolded in one common ſkin or tunic, which is almoſt obliterated as they ripen, and then each appears marked with excavated dots at its upper part.

Although many ſpecies of *Verbena* have but 2 ſtamina, yet the majority having 4, 2 of which are longer than the others, the genus ſurely comes moſt naturally into the claſs *Didynamia*, among plants to which it is cloſely allied.

The root of this plant worn by a ſtring round the neck is an old ſuperſtitious medicine for Scrophulous diſorders, and its uſe has been revived by an empiric in our days, very properly expoſed by Mr. Curtis in his *Flora Londinenſis*.



May 1st 1794 Published as the Act directs by J. Sowerby London

LAMIUM album.

White Dead-nettle.

DIDYNAMIA Gymnoſpermia.

GEN. CHAR. *Cal.* 5-cleft, its teeth awl-ſhaped, ſpreading. Upper lip of the *Corolla* undivided, vaulted; lower 2-lobed; orifice inflated, toothed at each ſide.

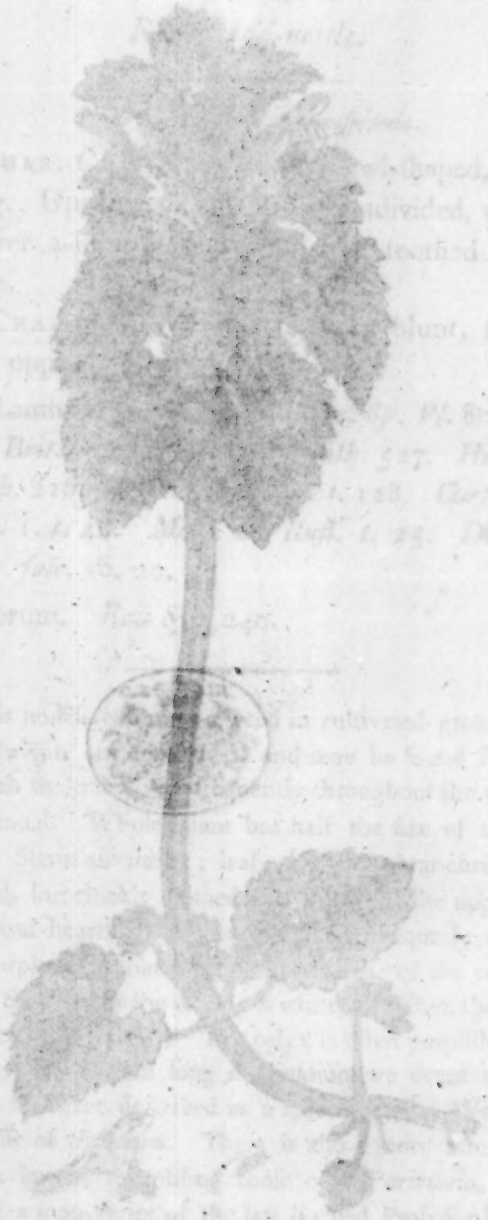
SPEC. CHAR. Leaves heart-ſhaped, pointed, ſtalked. Flowers about twenty in a whorl.

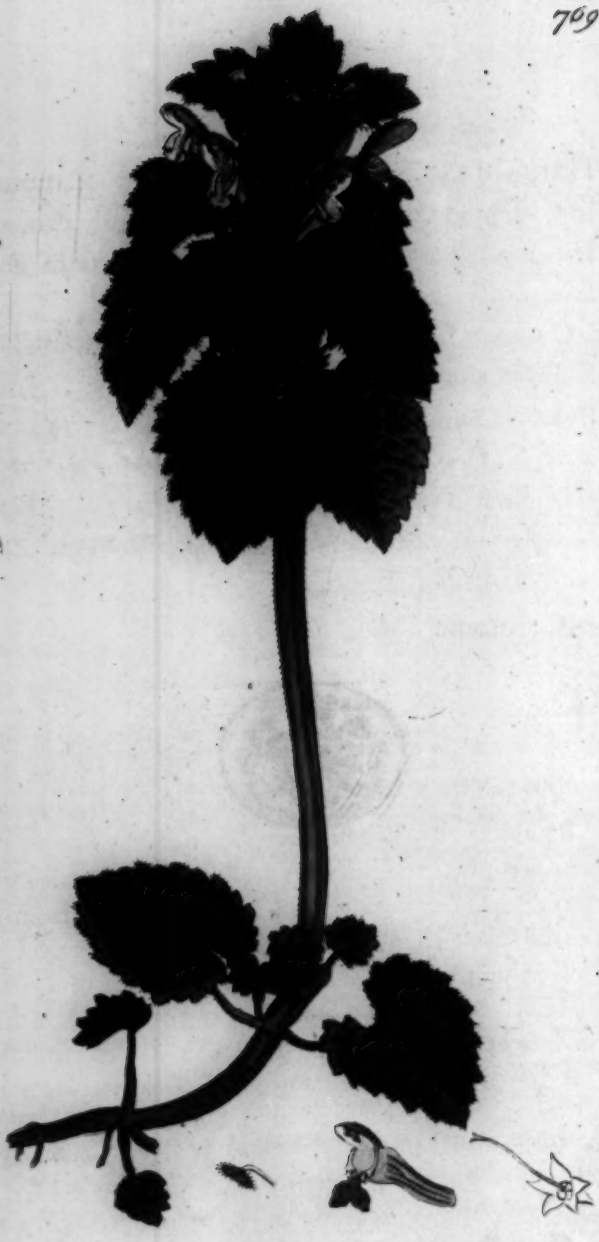
SYN. Lamium album. *Linn. Sp. Pl.* 809. *Sm. Fl. Brit.* 626. *Hudſ.* 255. *With.* 526. *Hull.* 131. *Relh.* 226. *Sibth.* 183. *Abbot.* 128. *Curt. Lond. faſc.* 2. *t.* 45. *Mart. Fl. Ruſt. t.* 26. *Raii Syn.* 240.

COMMON every where in waſte ground, by road ſides, and the borders of fields, where it flowers abundantly in May and June, and again for the moſt part in autumn.

The root is creeping and perennial. Stems about 12 or 18 inches high, ſquare, leafy. Leaves in pairs, all at nearly equal diſtances, on ſtalks, ſtrongly ſerrated, veiny, a little hairy. Whorls in the boſoms of the leaves, each of about twenty flowers, which are large, hairy, cream-coloured and handſome, much frequented by bees, and often gathered by children for the ſake of the honey, which may be ſucked out of the tube. Stamina hairy, with black antheræ. The toothed margin of the tube of the corolla affords an excellent eſſential character for this genus.

The name Dead-nettle has been given from the reſemblance of the leaves to the Stinging-nettle, which to a common obſerver is conſiderable, and has been univerſally noticed. The flowers are ſometimes found tinged with a bluſh-colour in the neighbourhood of Norwich. The herb is uſeleſs in agriculture, and in general not eaten by domeſtic animals, except perhaps the hard-feeding laborious aſs.





LAMIUM purpureum.

Red Dead-nettle.

DIDYNAMIA Gymnoſpermia.

GEN. CHAR. *Cal.* 5-cleft, its teeth awl-ſhaped, ſpreading. Upper lip of the *Corolla* undivided, vaulted; lower 2-lobed; orifice inflated, toothed at each ſide.

SPEC. CHAR. Leaves heart-ſhaped, blunt, ſtalked; the uppermoſt cluſtered together.

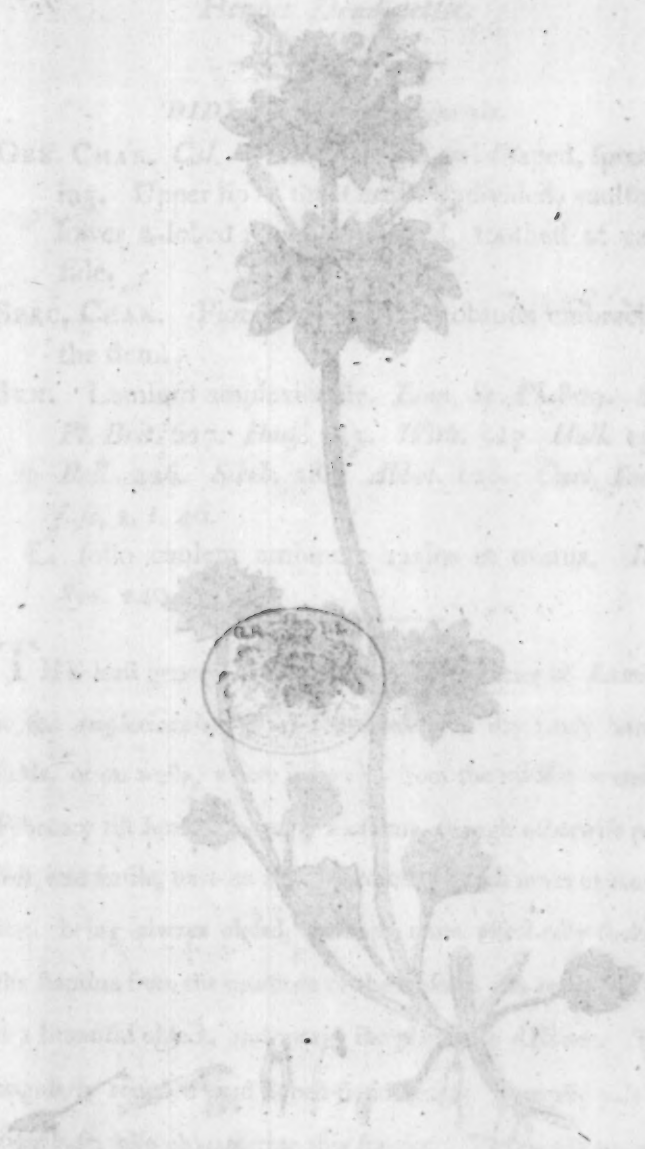
SYN. Lamium purpureum. *Linn. Sp. Pl.* 809. *Sm. Fl. Brit.* 627. *Hudſ.* 255. *With.* 527. *Hull.* 131. *Relh.* 226. *Sibth.* 183. *Abbot.* 128. *Curt. Lond. faſc.* 1. *t.* 42. *Mart. Fl. Ruſt. t.* 25. *Dickſ. H. Sicc. faſc.* 16. 20.

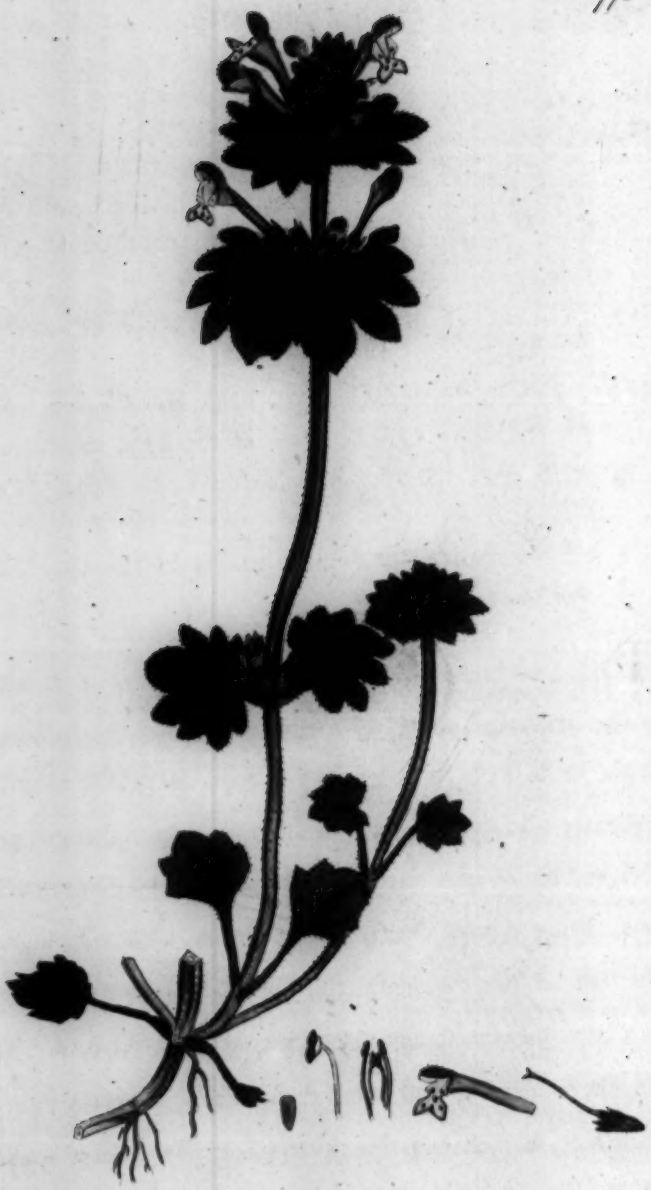
L. rubrum. *Raii Syn.* 240.

THIS is no leſs common a weed in cultivated ground than the L. *album* in untilled places, and may be found in flower from March to June; very frequently throughout the autumn.

Root annual. Whole plant but half the ſize of the laſt-deſcribed. Stems aſcending; leafy and a little branched below, then naked, but thickly clothed with leaves in the upper part. Leaves broad-heartſhaped, not pointed, unequally crenate. Flowers purple. Antheræ, or rather pollen, of the colour of red lead. Sometimes the corolla is white, and then the ſcarlet pollen is very conſpicuous. The calyx is often purpliſh.

A variety, for ſo from long obſervation we deem it, with cut leaves, has been deſcribed as a ſpecies by Dr. Withering by the name of *diſſectum*. There is alſo a more rare variety with entire leaves, reſembling thoſe of a *Parietaria*, which appears by a manuſcript of the late learned Profeſſor Martyn ſen. to have been firſt found near Sudbury by a Mr. Joſeph Andrews. This laſt is a weed in Chelſea garden.





LAMIUM amplexicaule.

Henbit Dead-nettle.

DIDYNAMIA Gymnoſpermia.

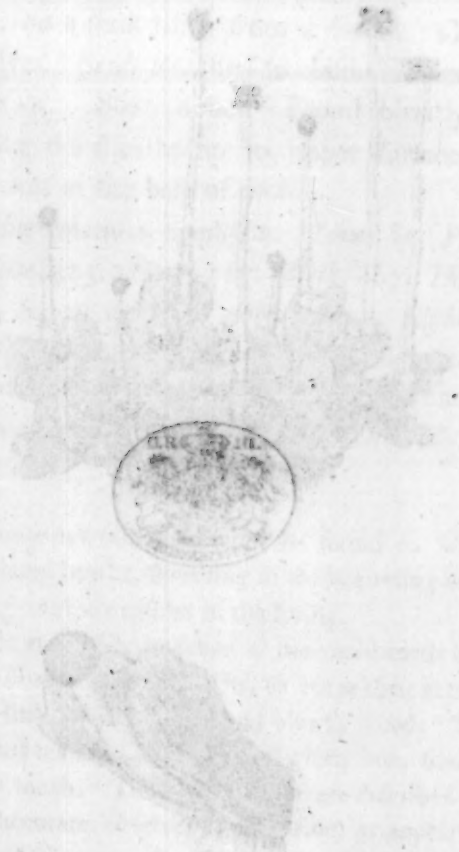
GEN. CHAR. *Cal.* 5-cleft, its teeth awl-ſhaped, ſpreading. Upper lip of the *Corolla* undivided, vaulted; lower 2-lobed; orifice inflated, toothed at each ſide.

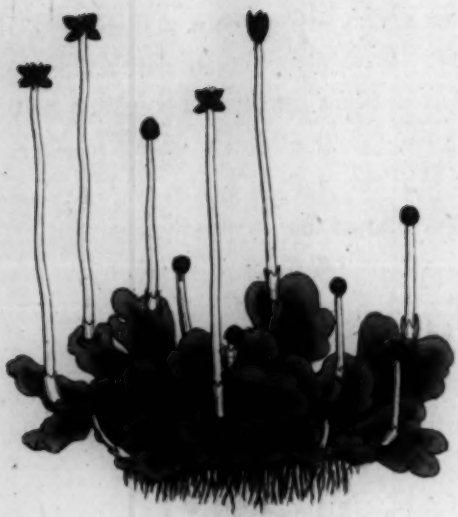
SPEC. CHAR. Floral leaves ſeſſile, obtuſe, embracing the ſtem.

SYN. Lamium amplexicaule. *Linn. Sp. Pl.* 809. *Sm. Fl. Brit.* 627. *Hudſ.* 255. *With.* 527. *Hull.* 132. *Relh.* 226. *Sibth.* 184. *Abbot.* 128. *Curt. Lond. faſc.* 2. *t.* 46.

L. folio caulem ambiente majus et minus. *Raii Syn.* 240.

THE leaſt general of the three Britiſh ſpecies of *Lamium* is the *amplexicaule*. It is found only in dry ſandy barren fields, or on walls, where it flowers from the middle or end of February till June. The early bloſſoms, though otherwiſe perfect, and fertile, have an abortive corolla, which never expands; but, being always cloſed, perhaps more effectually ſhelters the ſtamina from the moiſture of the ſeaſon. Its red velvet tip is a beautiful object, and marks the plant at a diſtance. The ſingularly rounded and lobed floral leaves, generally pale at their baſe, alſo characterize this ſpecies. The root is annual. Herb about the ſize of L. *rubrum*, with ſtems, as in that, but thinly clothed with leaves in the lower part. Pollen of a vermilion hue.





Nat. Hist. vol. published by [illegible]

JUNGERMANNIA epiphylla.

Broad-leaved Jungermannia.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male flowers ſeſſile.

Female on a ſtalk riſing from a ſheath. *Capſ.* with 4 valves. *Seeds* attached to elaſtic filaments.

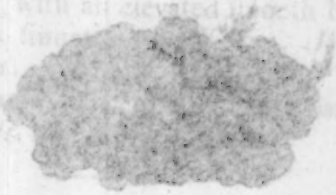
SPEC. CHAR. Stem none. Frond bluntly lobed, bearing the ſheaths on its upper ſurface, with a little leaf at the baſe of each.

SYN. Jungermannia epiphylla. *Linn. Sp. Pl.* 1602. *Fl. Suec.* 403. *Hudſ.* 517. *With.* 867. *Hull.* 282. *Relh. Suppl.* 3. 11. *Abbot.* 253. *Lightf.* 788. *Dickſ. H. Sicc. faſc.* 7. 22. *Hoffm. Germ. v.* 2. *t.* 4.

Lichenaſtrum capitulis rotundis e foliorum medio enaſcentibus. *Raii Syn.* 110. *Dill. Muſc.* 508. *t.* 74. *f.* 41.

THIS Jungermannia may often be found on wet ſhady banks, and damp heaths, flowering in the beginning of winter, and elevating its ripe capſules in the ſpring.

The fronds are cloſely attached to the moiſt earth by innumerable ſoft fibrous perennial roots, except at their extremities, which are a little raiſed, dilated and bluntly lobed. They are of a reticulated texture, and deep dull green hue, ſmooth and ſleek to the touch. The male flowers are deſcribed by Mr. Knapp (an accurate obſerver of this tribe) as appearing like dots on the older leaves. See Withering. Hedwig and Hoffman alſo repreſent them as warts diſcharging pollen. The female ones grow ſolitary from a cavity or groove in the diſk of the frond, accompanied by a ſmall incumbent leaf. The ſheath is cut into 4 or 5 teeth at its margin, and the globular capſule remains latent within it during winter. In the ſpring the capſule riſes up on a white tender ſtalk about 2 inches high, burſts into 4 parts, and ſcatters its ſeeds.



LICHEN ſinuatus.

Sinuated Lichen.

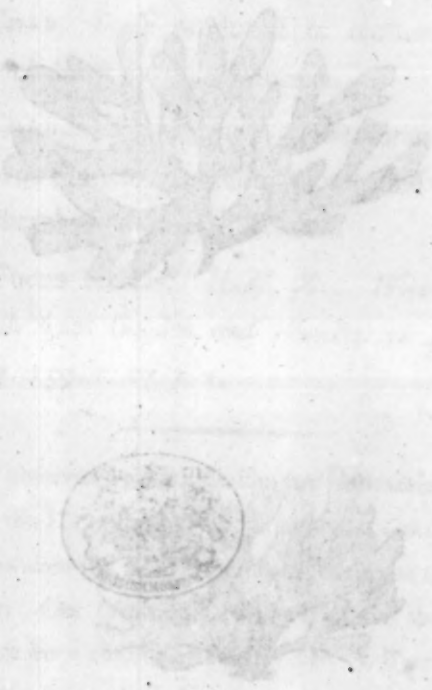
CRYPTOGAMIA Algæ.

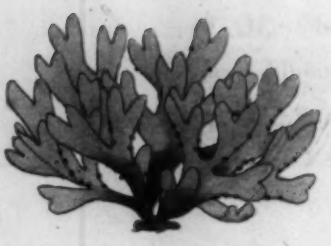
GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

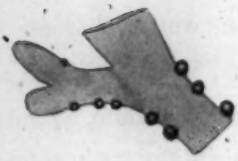
SPEC. CHAR. Imbricated, pellucid, ſomewhat gelatinous. Leaves roundiſh, ſinuated, crenate, glaucous-green, ſmooth on both ſides. Shields concave, browniſh, with an elevated ſmooth border.

SYN. Lichen ſinuatus. *Hudſ.* 535. *With. v.* 4. 75. *Hull.* 301.
Lichenoides tenue criſpum, foliis parvis depreſſis. *Dill. Muſc.* 145. *t.* 19. *f.* 33.

HEREFORDSHIRE, Devonſhire and Wales are the only parts of this iſland in which Mr. Hudſon's *Lichen ſinuatus* is known to have been found, ſo that Mr. D. Turner's having diſcovered it on the ruinous walls of Burgh caſtle, near Yarmouth, is no ſmall triumph for our Norfolk Flora. It occupies the interſtices of rocks or ſtones in ſhady places, and being very ſmall, is not eaſily detected, except in wet weather, when it aſſumes a bright ſea-green tinge. It grows in little denſe tufts, conſiſting of numerous ſpreading fronds, rounded, lobed and crenate, of a dull brown, verging towards a lead-colour, when dry, but of a glaucous graſs-green when moiſtened, by which alſo they become ſomewhat gelatinous. The ſhields are ſcattered over the diſk, as may be ſeen in the magnified portion of our figure, and are ſmall, elevated, concave, browniſh, eſpecially when dry, with a ſmooth elevated border of the colour of the frond. Sometimes we have found the outſide of the ſhields, though not their border, ſcaly with minute leaflets. This betrays ſome affinity to L. *Burgeſſii*, *t.* 300, to which L. *ſinuatus* is naturally allied in many reſpects, though ſo widely different in ſize, and in being ſmooth on the under ſide of the fronds. The Lichen which I am quoted by Dr. Withering as having found at Dumbarton proves to be his *rupeſtris* rather than this plant, with which we were not then acquainted.







FUCUS bifidus.

Cloven Fucus.

CRYPTOGAMIA Algæ.

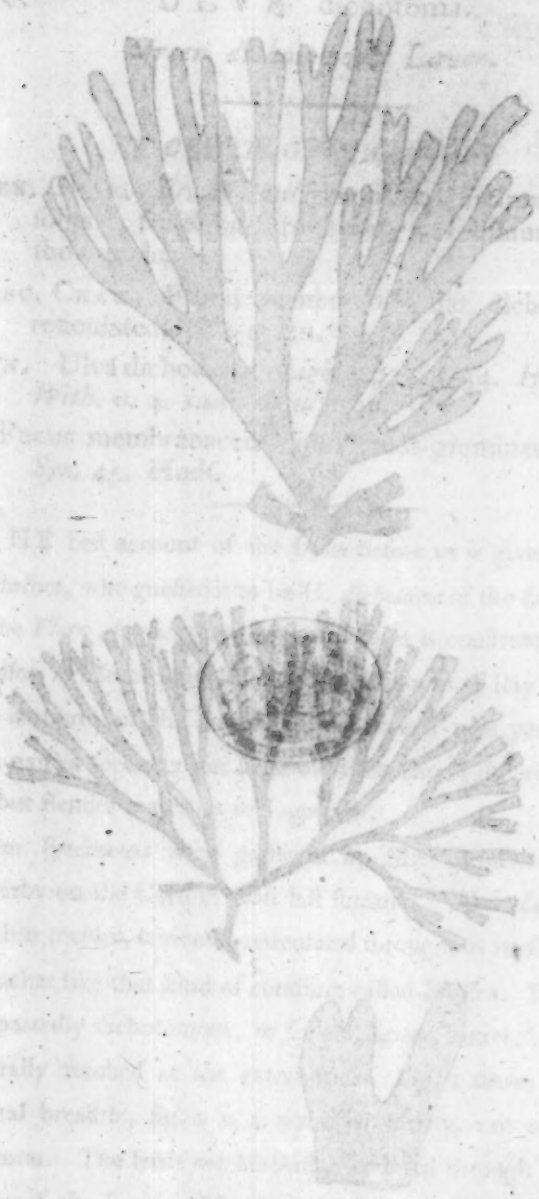
GEN. CHAR. *Seeds* produced in cluſtered tubercles, which burſt at their ſummits.

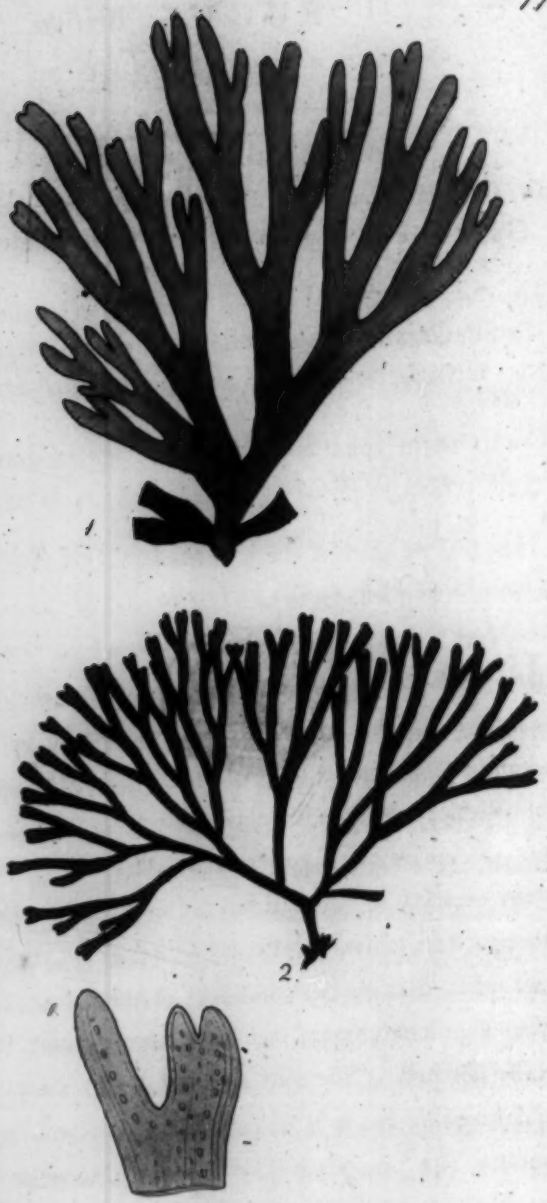
SPEC. CHAR. Fronds veinleſs, membranous, dilated, cloven; their ſegments divaricated and blunt. Tubercles marginal, ſcattered.

SYN. Fucus bifidus. *Hudſ.* 581. *With. v.* 4. 103. *Hull.* 320. *Gooden. and Woodw. in Linn. Tranſ. v.* 3. 159. *t.* 17. *f.* 1.

FIRST obſerved by Mr. Hudſon on ſubmarine rocks and ſtones on the Hampſhire coaſt, where Dr. Goodenough has likewiſe gathered it. Mr. Woodward found the ſame growing at Cromer. Our ſpecimens, waſhed up on the Yarmouth beach, have been communicated by Mr. D. Turner.

This Fucus is very little known, and it is an inſtance of Mr. Hudſon's penetration to have determined it as diſtinct without the aſſiſtance of the fructification, which he ſeems never to have ſeen, but which decidedly marks the ſpecies. The root is ſmall and fibrous. Fronds an inch or two in height, of a thin membranous texture, without vein or rib; their colour a light purpliſh red; their margin ſmooth and entire; their form ſomewhat wedge-ſhaped, cloven once, twice, or more into two bluntiſh lobes. The tubercles of ſeeds are ſcattered more or leſs cloſely along the edge of the frond, and are globular, prominent, but very ſmall, red, turning black as the ſeeds ripen.

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ULVA dichotoma.

Green dichotomous Laver.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Frond* membranous or gelatinous. *Seeds* ſolitary, ſcattered throughout its ſubſtance, under the cuticle.

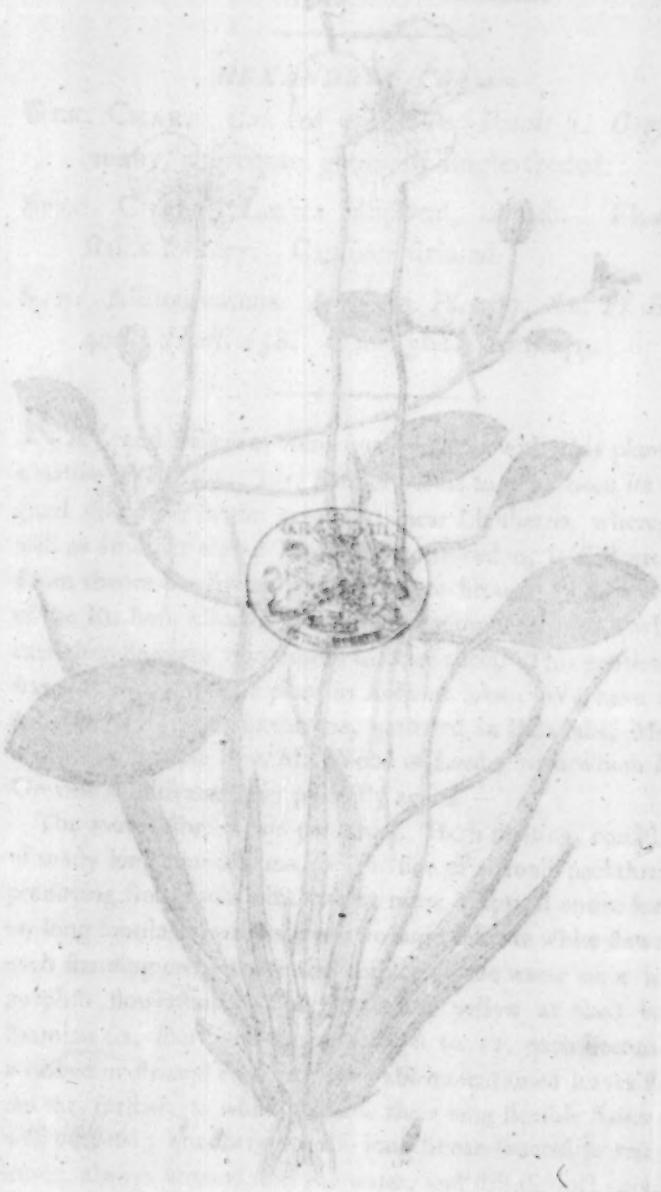
SPEC. CHAR. Frond membranous, flat, dichotomous, reticulated, pale-green.

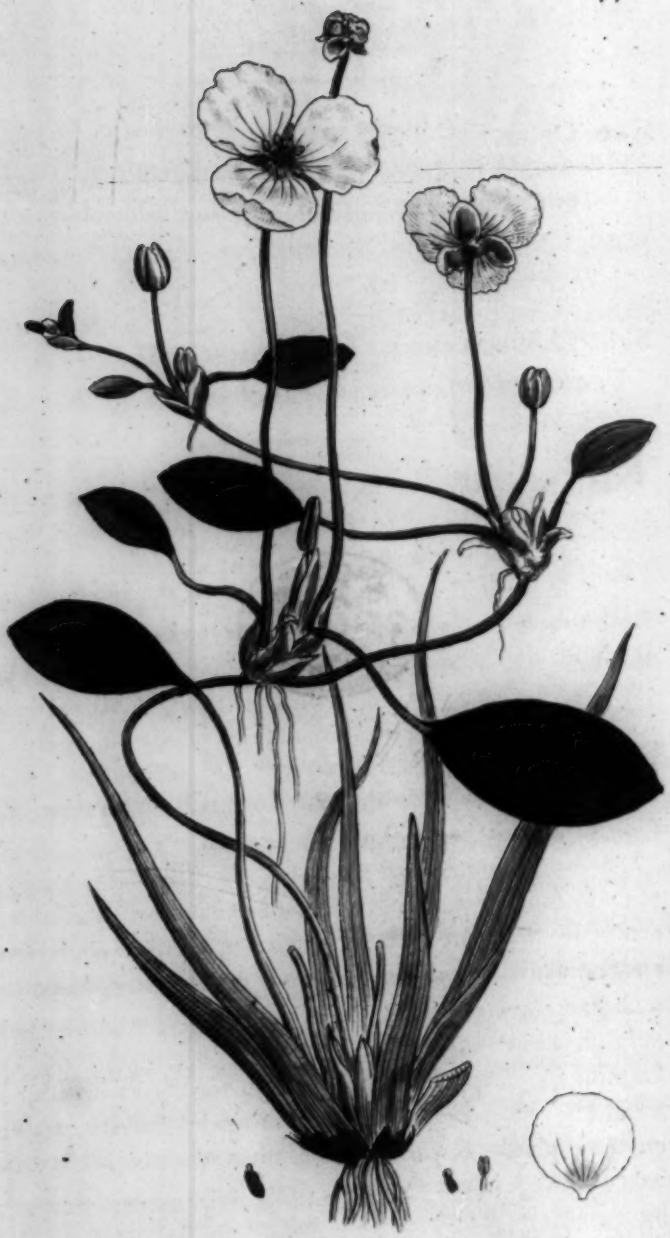
SYN. Ulva dichotoma. *Lightf.* 975. *t.* 34. *Hudſ.* 568. *With. v.* 4. 124. *Hull.* 312.

Fucus membranaceus dichotomus gramineus. *Raii Syn.* 45. Hudſ.

THE beſt account of the *Ulva* before us is given by Mr. Lightfoot, who gueſſed it to be U. *dichotoma* of the firſt edition of the *Flora Anglica*, and his conjecture is confirmed by Mr. Hudſon in the ſecond edition. The ſynonym of Ray ſtands on the authority of the writer laſt mentioned, who perhaps had ſeen named ſpecimens in ſome old herbarium; otherwiſe there are but ſlender materials to ſupport it.

Our ſpecimens were gathered by Mr. Turner and Mr. Sowerby on the Corniſh coaſt laſt ſummer. The plant is of a flat thin texture, curiouſly reticulated throughout its ſubſtance, ſomewhat like that kind of coralline called *Fluſtra*. The frond is repeatedly dichotomous, or forked, linear, entire, blunt and generally notched at the extremities. Fig. 1 ſhows its moſt general breadth; fig. 2 is a narrower variety, not much leſs common. The ſeeds are blackiſh, ſcattered through the ſubſtance of the frond. Mr. Sowerby has moreover obſerved a ſeries of little bladders between theſe ſeeds and the margin of the leaf. What their uſe or nature is we preſume not to determine.





ALISMA natans.

Floating Water-Plantain.

HEXANDRIA Polygynia.

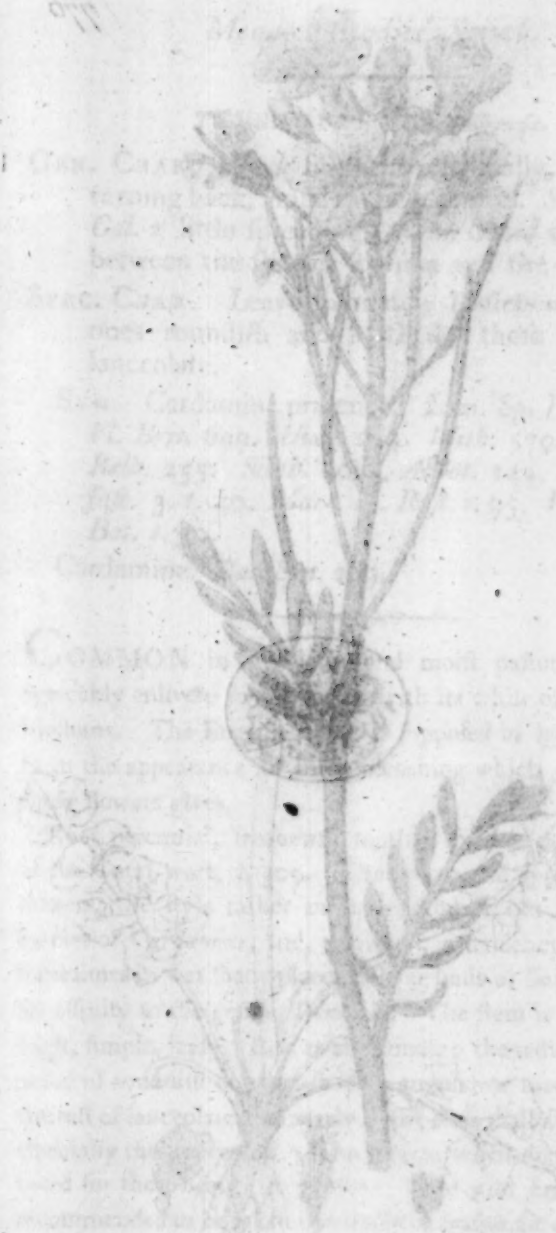
GEN. CHAR. *Cal.* of 3 leaves. *Petals* 3. *Capſules* many, aggregate, generally ſingle-ſeeded.

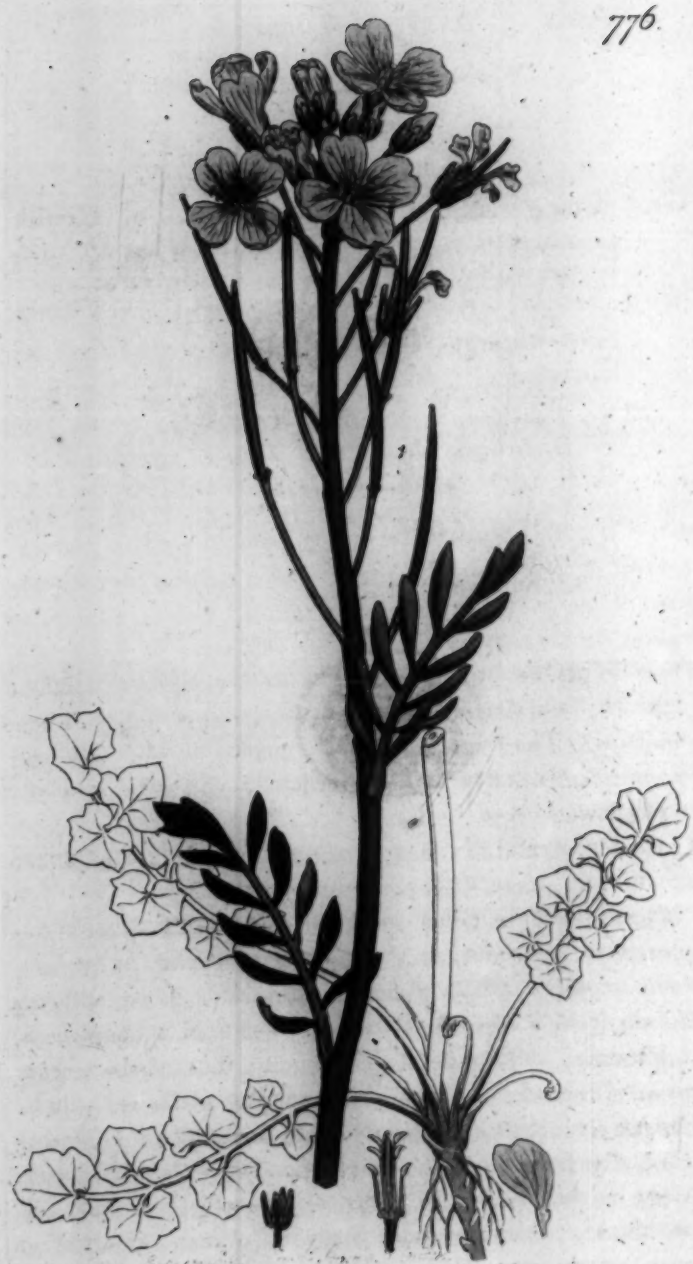
SPEC. CHAR. Leaves elliptical, obtuſe. Flower-ſtalks ſolitary. Capſules ſtriated.

SYN. Aliſma natans. *Linn. Sp. Pl.* 487. *Sm. Fl. Brit.* 402. *Hudſ.* 158. *With.* 362. *Hull.* 79.

RAY and Dillenius were unacquainted with this plant as a native of Britain. Mr. Brewer ſeems to have been its original diſcoverer in the great lake near Llanberris, where, as well as in other alpine lakes about Snowdon, it ſtill grows. From thence our living ſpecimens were brought to the garden of the Rt. hon. Charles Greville at Paddington, under whoſe care they flowered vigouroufly in May 1800. This gentleman has gathered the ſame plant in Keſwick lake. We have alſo received wild dried ſpecimens, gathered in Bala lake, Merionethſhire, by the Rev. Mr. Wood of Leeds, with which Mr. Greville's cultivated ones perfectly agree.

The root is fibrous and perennial. Herb floating, conſiſting of many long round ſtems, of the ſize of a ſmall packthread, producing from each joint two or more elliptical entire leaves on long footſtalks, with one or two large delicate white flowers, each ſtanding erect above the ſurface of the water on a long purpliſh flowerſtalk. The petals are yellow at their baſe. Stamina fix, ſhort. Germens from 6 to 12, each becoming a ribbed or ſtriated capſule. The abovementioned leaves float on the ſurface, to which purpoſe their long flexible ſtalks are well adapted; but there are alſo long linear-lanceolate radical leaves, always immerſed in the water, and ſtill diſtinct enough from the membranous ſtipulæ that accompany the footſtalks of the others.





CARDAMINE pratenſis.

Meadow Ladies'-Smock.

TETRADYNAMIA Siliquoſa.

GEN. CHAR. *Pod* burſting elaſtically, the valves turning back, equal to the partition. *Stigma* entire. *Cal.* a little ſpreading. One *Gland* on each ſide, between the ſhorter ſtamina and the calyx.

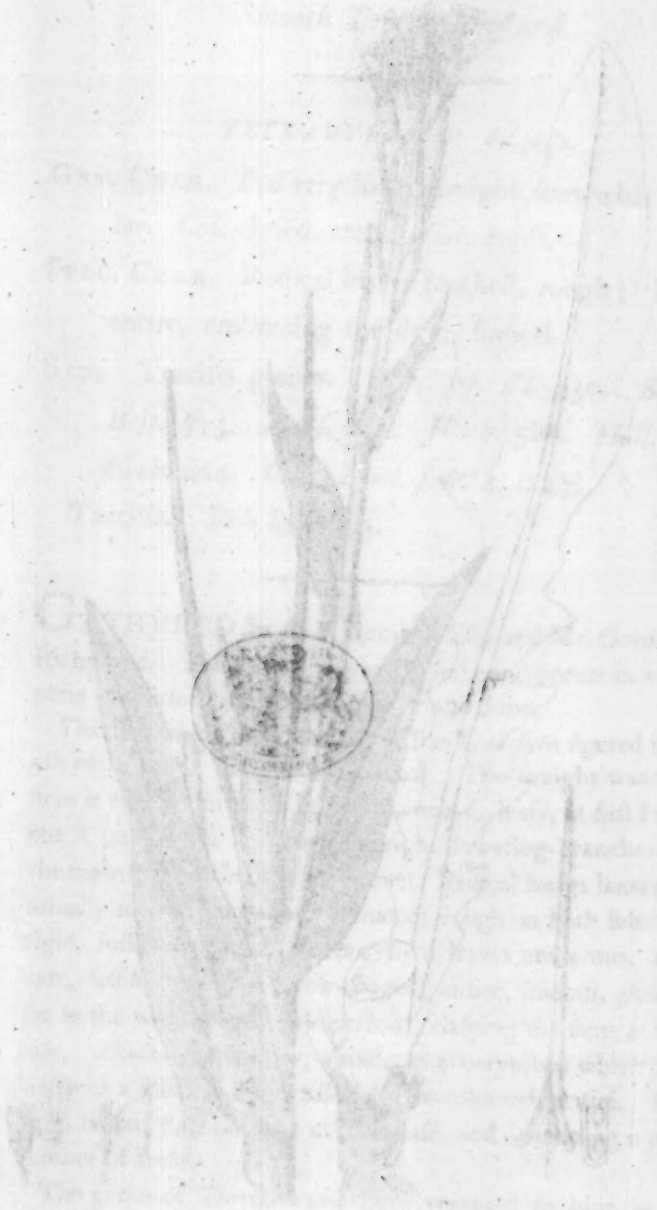
SPEC. CHAR. Leaves pinnate; leaflets of the radical ones roundiſh and toothed; thoſe of the ſtem lanceolate.

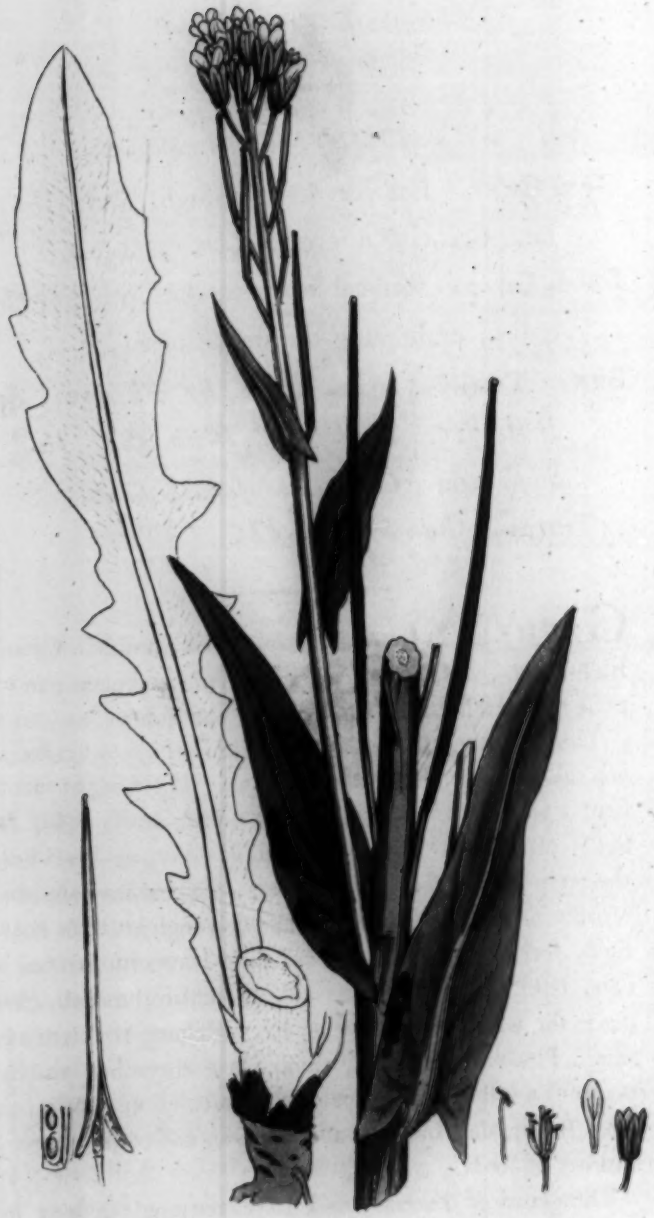
SYN. Cardamine pratenſis. *Linn. Sp. Pl.* 915. *Sm. Fl. Brit.* 699. *Hudſ.* 294. *With.* 579. *Hull.* 149. *Relh.* 255. *Sibth.* 205. *Abbot.* 142. *Curt. Lond. faſc.* 3. *t.* 40. *Mart. Fl. Ruſt. t.* 95. *Woodv. Med. Bot. t.* 30.

Cardamine. *Raii Syn.* 299.

COMMON in meadows and moiſt paſtures, which it agreeably enlivens in the ſpring with its white or pale purpliſh bloſſoms. The Engliſh name is ſuppoſed to have originated from the appearance of linen bleaching which a profuſion of theſe flowers gives.

Root perennial, frequently toothed in ſome degree like that of the Coral-wort, *t.* 309. The colour and appearance of the flowers, the ſtyle rather more lengthened out than in other ſpecies of *Cardamine*, and, above all, a tendency of the leaves ſometimes in wet ſhady places to bear buds or bulbs, all betray an affinity to the genus *Dentaria*. The ſtem is about a foot high, ſimple, leafy. Leaves all pinnate; the radical ones compoſed of roundiſh or heart-ſhaped, angular or toothed, leaflets; the reſt of lanceolate and nearly entire ones; all almoſt ſmooth, eſpecially the uppermoſt. The flowers when double are cultivated for their beauty in gardens. The wild ones have been recommended to be taken internally in ſpaſmodic diſorders, and even ſaid to cure the Epilepſy, but experience has not confirmed their reputation. They were preſcribed dried, which is generally not an advantageous ſtate for plants of this natural order.





TURRITIS glabra.

Smooth Tower-Muſtard.

TETRADYNAMIA Siliquoſa.

GEN. CHAR. *Pod* very long, ſtraight, ſomewhat angular. *Cal.* cloſed, erect. *Cor.* erect.

SPEC. CHAR. Radical leaves toothed, rough; the reſt entire, embracing the ſtem, ſmooth.

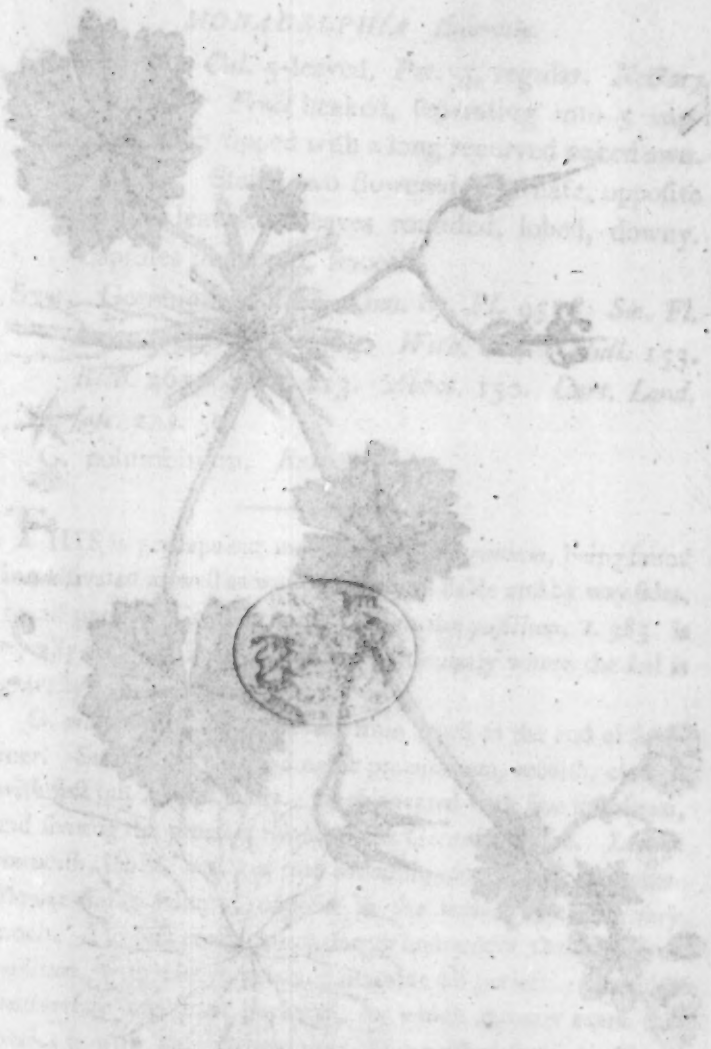
SYN. Turritis glabra. *Linn. Sp. Pl.* 930. *Sm. Fl. Brit.* 715. *Hudſ.* 291. *With.* 588. *Hull.* 148. *Sibth.* 204. *Curt. Lond. faſc.* 4. *t.* 47.

Turritis. *Raii Syn.* 293.

GATHERED by A. B. Lambert Eſq. and Mr. Groult near Richmond. It loves a dry gravelly ſoil, and occurs in various parts of Norfolk, flowering in May and June.

This is a much taller plant than the T. *birſuta* figured in our 9th vol. *t.* 587. The root is annual. The ſtraight wand-like ſtem is two feet or more in height, round, leafy, at firſt ſimple, but it produces a few lateral upright flowering-branches after the main ſpike of ſeeds is full grown. Radical leaves lanceolate, broadly toothed and almoſt ſinuated, rough on both ſides with rigid, forked or ſimple, hairs: ſtem-leaves numerous, alternate, ſeſſile, upright, arrow-ſhaped, entire, ſmooth, glaucous (as is the whole herb more or leſs), claſping the ſtem at their baſe. Flowers numerous, ſmall, in a corymbus which ſoon becomes a ſpike. Petals pale ſulphur-coloured, entire. Pods long, linear, flat, burſting at their baſe, and containing a great number of ſeeds.

The genus of *Turritis*, as I have ventured to hint in the *Flora Britannica*, is ſcarcely to be diſtinguiſhed from *Arabis* either by its natural habit or technical characters.



778.

GERANIUM molle.

Dove's-foot Crane's-bill.

MONADELPHIA Decandria.

GEN. CHAR. *Cal.* 5-leaved. *Pet.* 5, regular. *Nectary* 5 glands. *Fruit* beaked, ſeparating into 5 capſules, each tipped with a long recurved naked awn.

SPEC. CHAR. Stalks two-flowered, alternate, oppoſite to the leaves. Leaves rounded, lobed, downy. Capſules puckered, ſmooth.

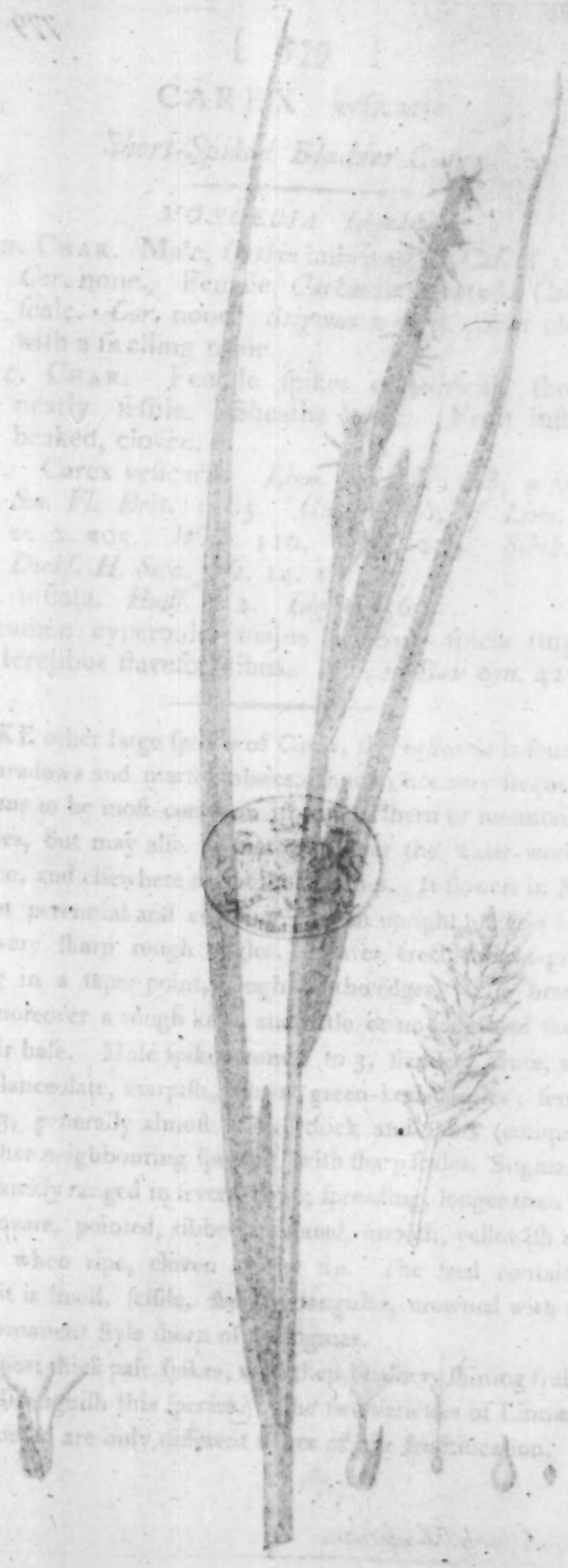
SYN. Geranium molle. *Linn. Sp. Pl.* 955? *Sm. Fl. Brit.* 734. *Hudſ.* 303. *With.* 604. *Hull.* 153. *Relh.* 261. *Sibth.* 213. *Abbot.* 150. *Curt. Lond. faſc.* 2. *t.* 50.

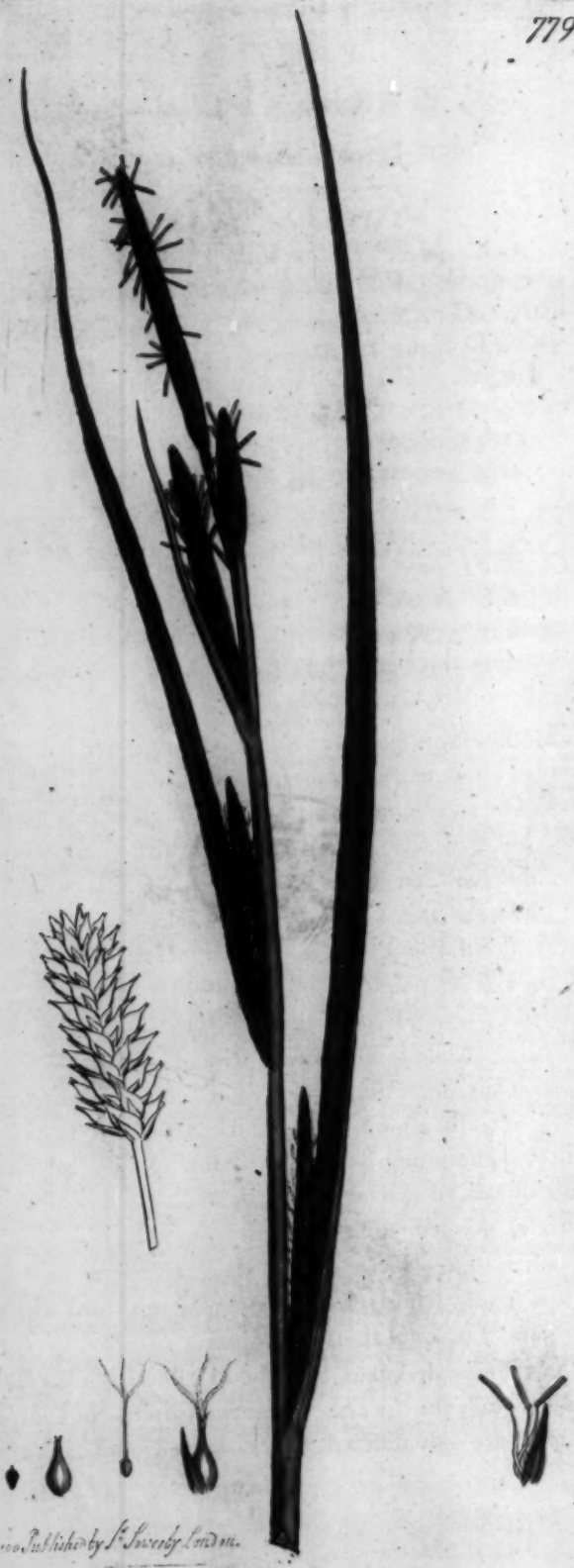
G. columbinum. *Raii Syn.* 359.

THIS is perhaps our moſt common *Geranium*, being found in cultivated as well as waſte ground, in fields and by way ſides, in all parts of Great Britain, though the *puſillum*, *t.* 385, is equally plentiful in many places, particularly where the ſoil is gravelly.

G. *molle* is annual, flowering from April to the end of ſummer. Stems moſtly ſpreading or procumbent, reddiſh, clothed with ſoft but longiſh hairs. Herb covered with fine ſoft down, and ſharing the peculiar odour of the *Geranium* tribe. Leaves roundiſh, lobed, and cut into broadiſh, not linear, ſegments. Flower-ſtalks ſolitary, oppoſite to the leaves, ſpreading very much. Flowers erect, much larger and redder than thoſe of *puſillum*, with cloven petals. Stamina all perfect. Capſules tranſverſely rugoſe or puckered, by which curious mark the ſpecies is with abſolute certainty diſtinguiſhed from *puſillum*, *pyrenaicum*, and *rotundifolium*, with all which it has often been confounded. The ſeeds are quite ſmooth, not dotted.

Linnæus certainly did not diſtinguiſh this from the *pyrenaicum* when he publiſhed his *Species Plantarum*, and we therefore quote that work in the preſent inſtance with doubt.





J. Sowerby Published by Sr. Sowerby London.

CAREX veſicaria.

Short-Spiked Bladder Carex.

MONOECIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. *Stigmas* 2 or 3. *Seed* clothed with a ſwelling tunic.

SPEC. CHAR. Female ſpikes cylindrical, ſhortiſh, nearly ſeſſile. Sheaths none. Fruit inflated, beaked, cloven.

SYN. Carex veſicaria. *Linn. Sp. Pl.* 1388, α and γ. *Sm. Fl. Brit.* 1005. *Gooden. Tr. of Linn. Soc. v.* 2. 205. *With.* 110. *Hull.* 209. *Sibth.* 32. *Dickſ. H. Sicc. faſc.* 14. 18.

C. inflata. *Hudſ.* 412. *Lightf.* 567.

Gramen cyperoides majus præcox, ſpicis turgidis teretibus flaveſcentibus. *Dill. in Raii Syn.* 420.

LIKE other large ſpecies of *Carex*, the *veſicaria* is found in wet meadows and marſhy places, though not very frequently. It ſeems to be moſt common in the northern or mountainous counties, but may alſo be met with near the water-works at Pimlico, and elſewhere about the Thames. It flowers in May.

Root perennial and creeping. Stem upright, 2 feet high, with very ſharp rough angles. Leaves erect, bright-green, ending in a taper point, rough on the edges. The bracteæ have moreover a rough keel, and little or no length of ſheath at their baſe. Male ſpikes from 1 to 3, ſlender, acute, with linear-lanceolate, ſharpiſh, brown, green-keeled ſcales; female about 3, generally almoſt ſeſſile, thick and ſhort (compared with other neighbouring ſpecies), with ſharp ſcales. Stigmas 3. Fruit thickly ranged in ſeveral rows, ſpreading, longer than the ſcales, ovate, pointed, ribbed, inflated, ſmooth, yelloviſh and ſhining when ripe, cloven at the tip. The ſeed contained within it is ſmall, ſeſſile, ſhort, triangular, crowned with the long permanent ſtyle ſhorn of its ſtigmas.

The ſhort thick pale ſpikes, with their bladdery ſhining fruits, readily diſtinguiſh this ſpecies. The two varieties of Linnæus above quoted are only different ſtages of the fructification.

Sept. 1 1800. Published by J. Sowerby, London.

CAREX ampullacea.

Slender-beaked Bladder Carex.

MONOECIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. Stigmas 2 or 3. *Seed* clothed with a ſwelling tunic.

SPEC. CHAR. Female ſpikes cylindrical, elongated, nearly ſeſſile. Sheaths none. Fruit inflated, with a linear forked beak.

SYN. Carex ampullacea. *Gooden. Tr. of Linn. Soc. v.* 2. 207. *Sm. Fl. Brit.* 1006. *With.* 110. *Hull.* 209.

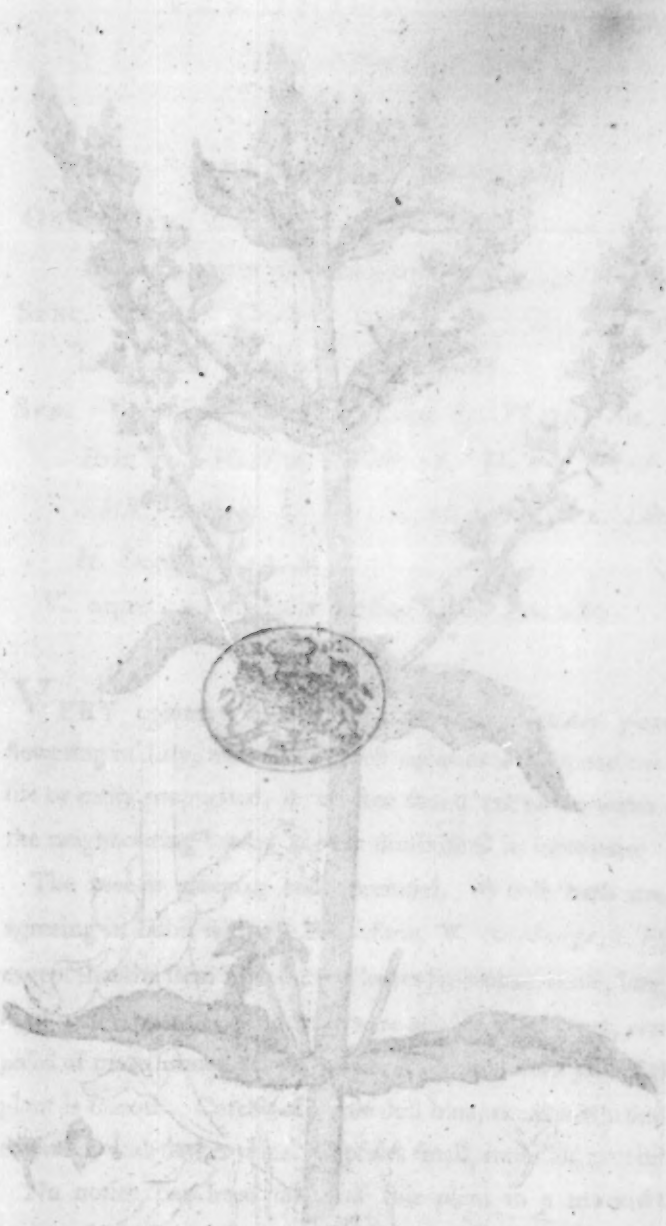
C. veſicaria. *Hudſ.* 413. *Lightf.* 566.

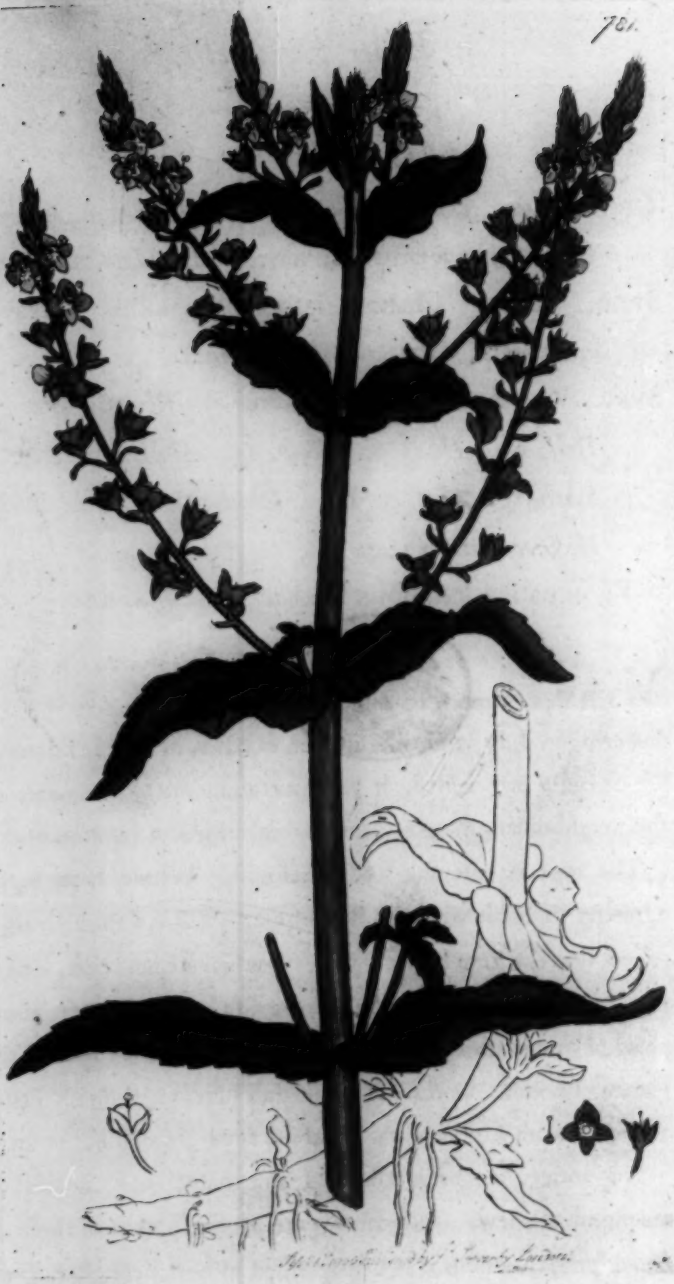
C. roſtrata. *Sibth.* 32. *Abbot.* 206.

Gramen cyperoides polyſtachyon majus, ſpicis teretibus erectis. *Raii Syn.* 419.

THIS Carex is alſo moſt common in Scotland and the northern counties; in the ſouth it more rarely occurs. It is plentiful at Seething in Norfolk. We received our ſpecimen by favour of Mr. J. Holme of Peter-houſe, Cambridge, from a watery gravel-pit near that town, where the plant was firſt remarked by the Rev. Mr. Newton, F. L. S. It is not a Linnæan ſpecies, and has been much miſtaken by different botaniſts. Hudſon quotes a ſynonym of Ray which belongs to our *veſicaria*, ſubjoining its proper denomination as a variety. Dr. Stokes firſt well illuſtrated it by the name of *roſtrata*, in Dr. Withering's 2d edition. It flowers in May.

Root creeping, perennial. Stem with 3 blunt angles, which below the loweſt bractea are ſmooth. Leaves narrow, rather glaucous. Male ſpikes 2 or 3, very ſlender, with bluntiſh ſcales; female 2 or 3, with generally ſharper ones. Theſe female ſpikes are longer and more ſlender than thoſe of C. *veſicaria*, conſiſting of numerous ſpreading yelloviſh inflated roundiſh fruits, each terminating in a linear beak, nearly of its own length, which is cloven at the point. Seed ſmall, crowned with the long ſtyle.





VERONICA Anagallis.

Water Speedwell.

DIANDRIA Monogynia.

GEN. CHAR. *Cor.* inferior, of 1 petal, 4-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſ.* 2-celled.

SPEC. CHAR. Cluſters lateral, oppoſite. Leaves lanceolate, ſerrated. Stem erect.

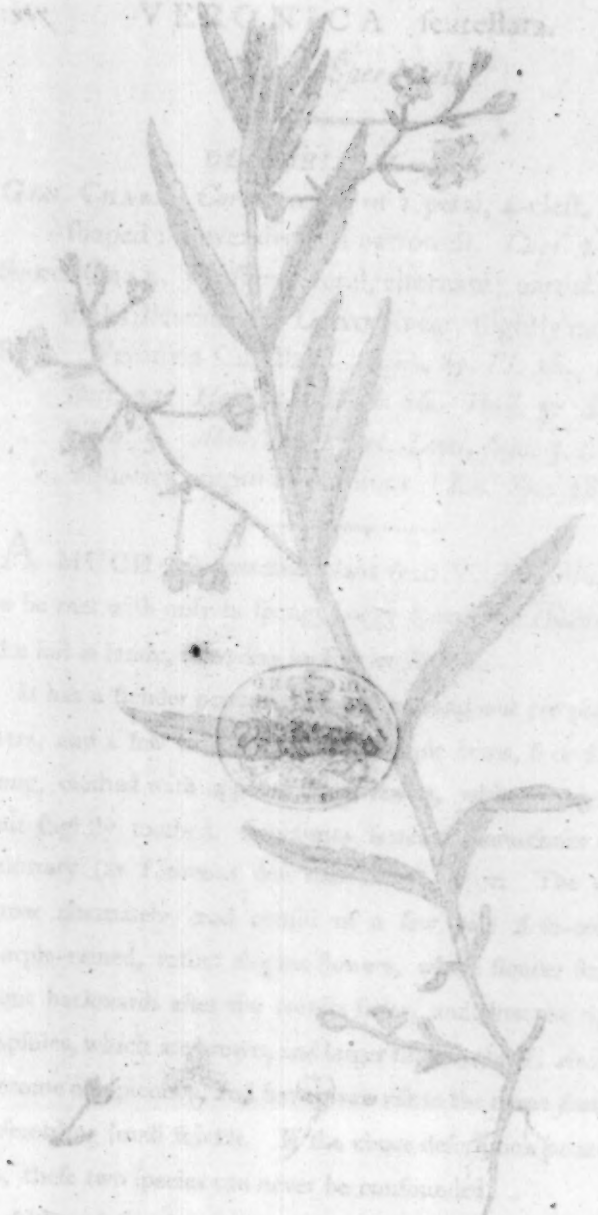
SYN. Veronica Anagallis. *Linn. Sp. Pl.* 16. *Sm. Fl. Brit.* 20. *Hudſ.* 5. *With.* 15. *Hull.* 5. *Relh.* 5. *Sibth.* 5. *Abbot.* 3. *Curt. Lond. faſc.* 5. *t.* 2. *Dickſ. H. Sicc. faſc.* 13. 4.

V. aquatica longifolia media. *Raii Syn.* 280.

VERY common in ditches and muddy watery places, flowering in July, and, like all ſuch aquatics as are tenacious of life or eaſily propagated, it is often found out of the water on the neighbouring banks, merely diminiſhed in luxuriance.

The root is creeping and perennial. Whole herb much agreeing in habit with the Brooklime, V. *Becabunga*, *t.* 655, except that the ſtem is erect, and leaves lanceolate, acute, longer than in that ſpecies. The cluſters are alſo longer, ſharper, compoſed of more numerous and ſmaller flowers. Every part of the plant is ſmooth. Corolla of a pale dull blue, occaſionally fleſh-coloured, with darker veins. Capſules ſmall, roundiſh, notched.

No notice has been taken of this plant in a medical or œconomical view. Its qualities are probably akin to thoſe of Brooklime, to which it is nearly allied in botanical characters, though unqueſtionably a diſtinct ſpecies.



VERONICA ſcutellata.

Marſh Speedwell.

DIANDRIA Monogynia.

GEN. CHAR. *Cor.* inferior, of 1 petal, 4-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſ.* 2-celled.

SPEC. CHAR. Cluſters lateral, alternate; partial flower-ſtalks divaricated. Leaves linear, ſlightly indented.

SYN. Veronica ſcutellata. *Linn. Sp. Pl.* 16. *Sm. Fl. Brit.* 21. *Hudſ.* 5. *With.* 16. *Hull.* 5. *Relh.* 6. *Sibth.* 5. *Abbot.* 3. *Curt. Lond. faſc.* 5. *t.* 3.
V. aquatica anguſtifolia minor. *Raii Syn.* 280.

A MUCH leſs common plant than V. *Anagallis*, being to be met with only in ſpongy boggy ſpots, and chiefly where the ſoil is ſandy, flowering in July or Auguſt.

It has a ſlender perennial root, throwing out creeping runners, and a few weak, ſpreading, ſimple ſtems, 6 or 8 inches long, clothed with oppoſite linear leaves, which are generally but ſlightly toothed, ſometimes ſerrated, ſometimes on the contrary (as Linnæus deſcribes them) entire. The cluſters grow alternately, and conſiſt of a few pale fleſh-coloured, purple-veined, rather elegant flowers, whoſe ſlender ſtalks are bent backwards after the corolla fades, and then the ripening capſules, which are brown, and larger than in the V. *Anagallis*, become conſpicuous, and have given riſe to the name *ſcutellata*, reſembling ſmall ſhields. If the above deſcription be attended to, theſe two ſpecies can never be confounded.

Although for the moſt part ſmooth, the plant now before us has been found in a downy ſtate by the Rev. C. Sutton of Norwich; and indeed I have obſerved that variety to be common on St. Faith's Newton bogs.

VERONICA agreſtis.

Procumbent Speedwell.

DIANDRIA Monogynia.

GEN. CHAR. *Cor.* inferior, of 1 petal, 4-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſ.* 2-celled.

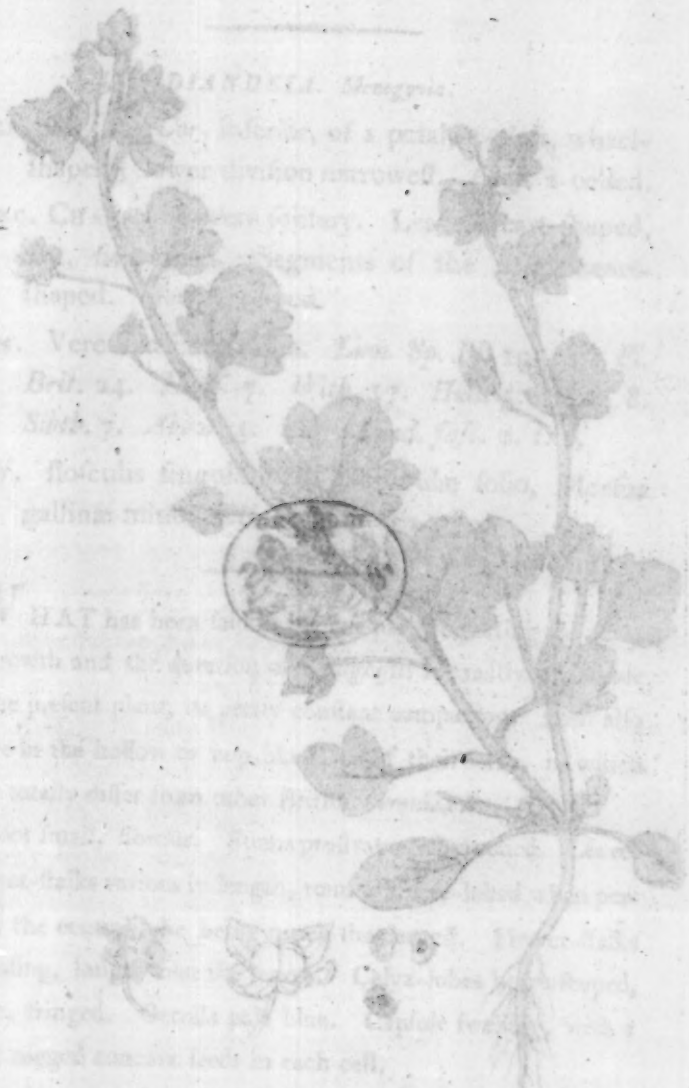
SPEC. CHAR. Flowers ſolitary. Leaves ovate, deeply ſerrated, ſhorter than the flower-ſtalks. Stems procumbent. Seeds cupped.

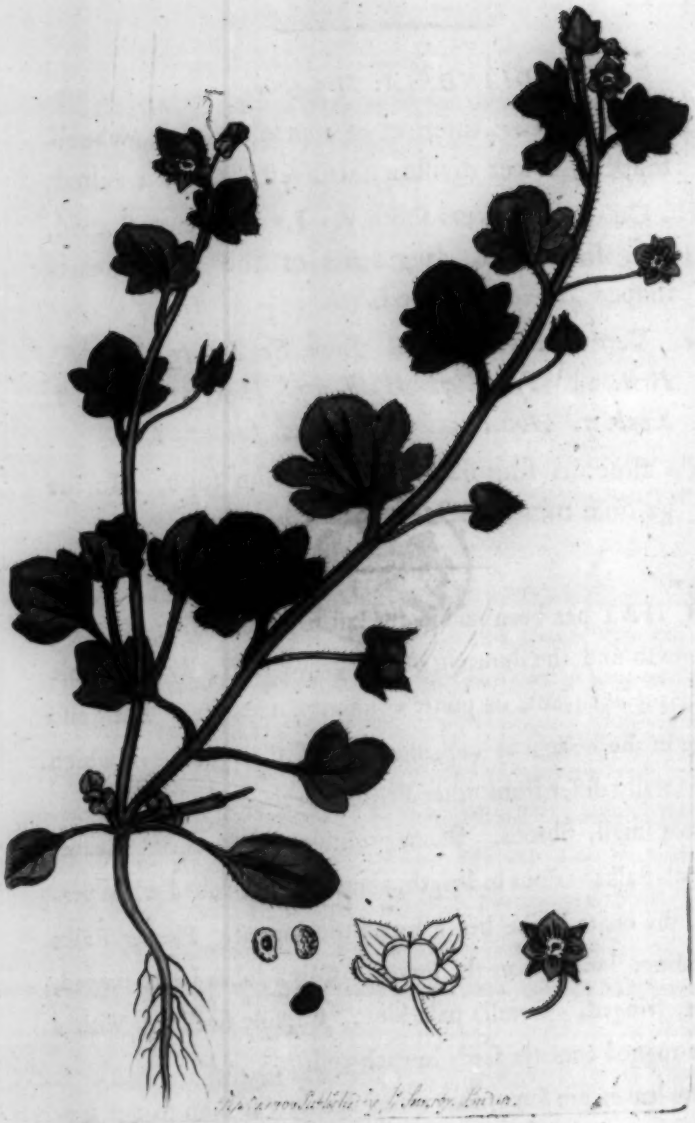
SYN. Veronica agreſtis. *Linn. Sp. Pl.* 18. *Sm. Fl. Brit.* 23. *Hudſ.* 7. *With.* 17. *Hull.* 5. *Relh.* 7. *Sibth.* 6. *Abbot.* 4. *Curt. Lond. faſc.* 1. *t.* 1.

V. floribus ſingularibus, in oblongis pediculis, chamædryfolia. *Raii Syn.* 279.

No weed can be more general than this in all cultivated fields and gardens, where, though an annual, it is always to be found in ſome ſtage or other, and in flower from the beginning of ſpring till the end of autumn.

The root is ſmall and fibrous. Stems ſeveral, procumbent, long, leafy, round, hairy, not branched except at their baſe. Leaves ſcattered, on ſhort foot-ſtalks, ovate, inclining to heart-ſhaped, deeply ſerrated, a little rough and hairy. Flowers on ſimple ſolitary axillary ſtalks, which exceed in length their correſponding leaves, and after flowering are curved downwards. Segments of the calyx ovato-lanceolate, ciliated, generally quite entire, now and then irregularly toothed. Corolla ſmall, bright blue. Capſule of two round ſwelling lobes, rough. Seeds about 6 in each cell, externally rugged, cupped or hollowed out on the other ſide, in which hollow the little ſtalk is fixed that attaches them to the ſeed-veſſel. Their whole ſtructure is curious, and totally different from that of V. *arvenſis*.





VERONICA hederifolia.

Ivy-leaved Speedwell.

DIANDRIA Monogynia.

GEN. CHAR. *Cor.* inferior, of 1 petal, 4-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſ.* 2-celled.

SPEC. CHAR. Flowers ſolitary. Leaves heart-ſhaped, flat, five-lobed. Segments of the calyx heart-ſhaped. Seeds cupped.

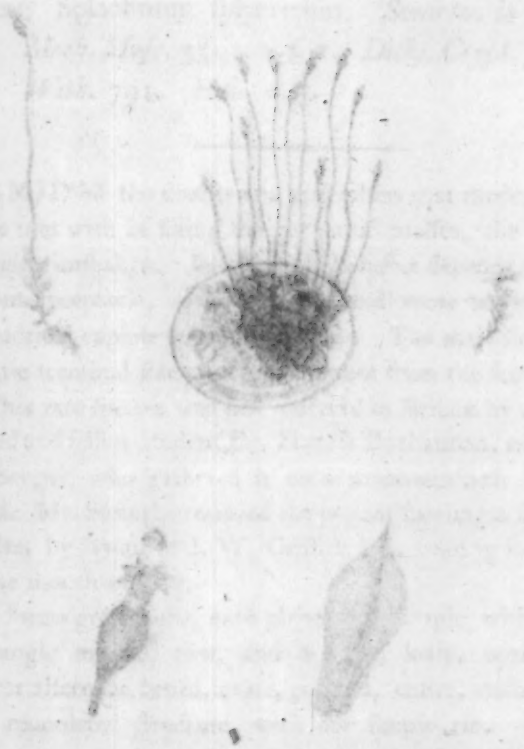
SYN. Veronica hederifolia. *Linn. Sp. Pl.* 19. *Sm. Fl. Brit.* 24. *Hudſ.* 7. *With.* 17. *Hull.* 5. *Relh.* 8. *Sibth.* 7. *Abbot.* 5. *Curt. Lond. faſc.* 2. *t.* 1.

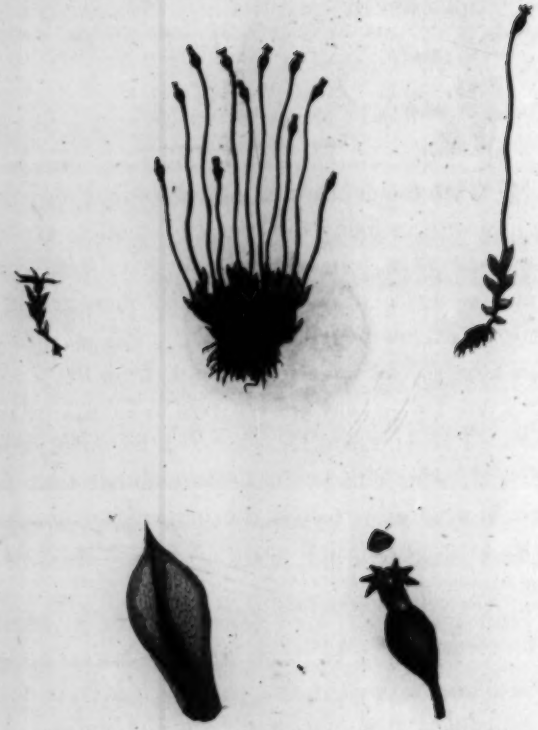
V. floſculis ſingularibus, Hederulæ folio, Morſus gallinæ minor dicta. *Raii Syn.* 280.

WHAT has been ſaid in the laſt page reſpecting the place of growth and the duration of V. *agreſtis* is exactly applicable to the preſent plant, its pretty conſtant companion. Both alſo agree in the hollow or cup-like form of their ſeeds, in which they totally differ from other Britiſh *Veronicæ*.

Root ſmall, fibrous. Stems proſtrate, unbranched. Leaves on foot-ſtalks various in length, roundiſh, five-lobed when perfect, the central lobe being much the largeſt. Flower-ſtalks ſpreading, longer than the leaves. Calyx-lobes heart-ſhaped, acute, fringed. Corolla pale blue. Capſule ſwelling, with 2 large rugged concave ſeeds in each cell.

The leaves are ſometimes more deeply cut than in our ſpecimen, in which ſtate young botaniſts often take this plant for V. *triphyllos*, ſee our 1ſt vol. *t.* 26. If the ſeeds be attended to no miſtake can happen.





SPLACHNUM ſphæricum.

Green globular Splachnum.

CRYPTOGAMIA Muſci.

GEN. CHAR. *Capſule* cylindrical, placed on a fleſhy *receptacle*. *Fringe* of a ſimple row of teeth.

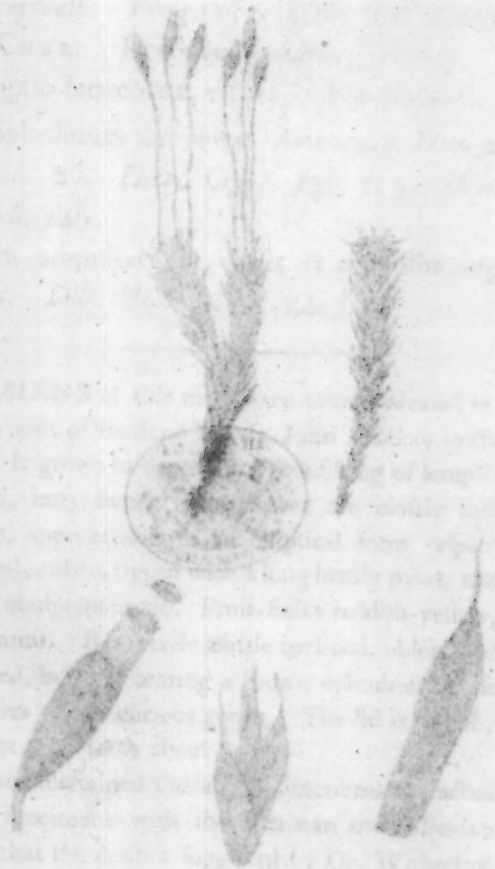
SPEC. CHAR. Receptacle nearly globular, green. Leaves ovate, pointed, entire.

SYN. Splachnum ſphæricum. *Swartz. in Linn. fil. Meth. Muſc.* 33. *t.* 1. *f.* 1. *Dickſ. Crypt. faſc.* 1. 3. *With.* 791. *Hull.* 245.

AMID all the doubts and difficulties that modern botaniſts have met with in fixing the genera of moſſes, the *Splachnum* remains unſhaken. Its eſſential character depends on the ſucculent receptacle, always thicker and more turgid than the cylindrical capſule which it ſuſtains. The male flowers form a little terminal ſtar on a ſeparate root from the female.

This rare ſpecies was firſt obſerved in Britain by my worthy friend and fellow-ſtudent Dr. Francis Buchannan, now reſident in Bengal, who gathered it on a mountain near Stirling in 1782. Mr. Sowerby received the preſent ſpecimens from North Wales, by favour of J. W. Griffith Eſq. bearing its ripe fruit in the month of July.

It forms green tufts, each plant being ſimple, with a fibrous, ſeemingly annual, root, and a ſhort, leafy, upright ſtem. Leaves alternate, broad, ovate, pointed, entire, undulated, of a fine reticulated ſtructure, with one ſimple rib. Fruit-ſtalk ſolitary, terminal, erect, a little waved, pale reddiſh yellow, green at the ſummit, terminated by a dark-green, almoſt globular receptacle, on which ſtands the ſmall cylindrical brown capſule, at firſt covered with a blunt hemiſphærical lid, which ſoon falls off, and the orifice appears fringed with a ſimple row of ſpreading teeth. The columella projects a little, with a blunt red head.



SPLACHNUM mnioides.

Brown tapering Splachnum.

CRYPTOGAMIA Muſci.

GEN. CHAR. *Capſule* cylindrical, placed on a fleſhy *receptacle*. *Fringe* of a ſimple row of teeth.

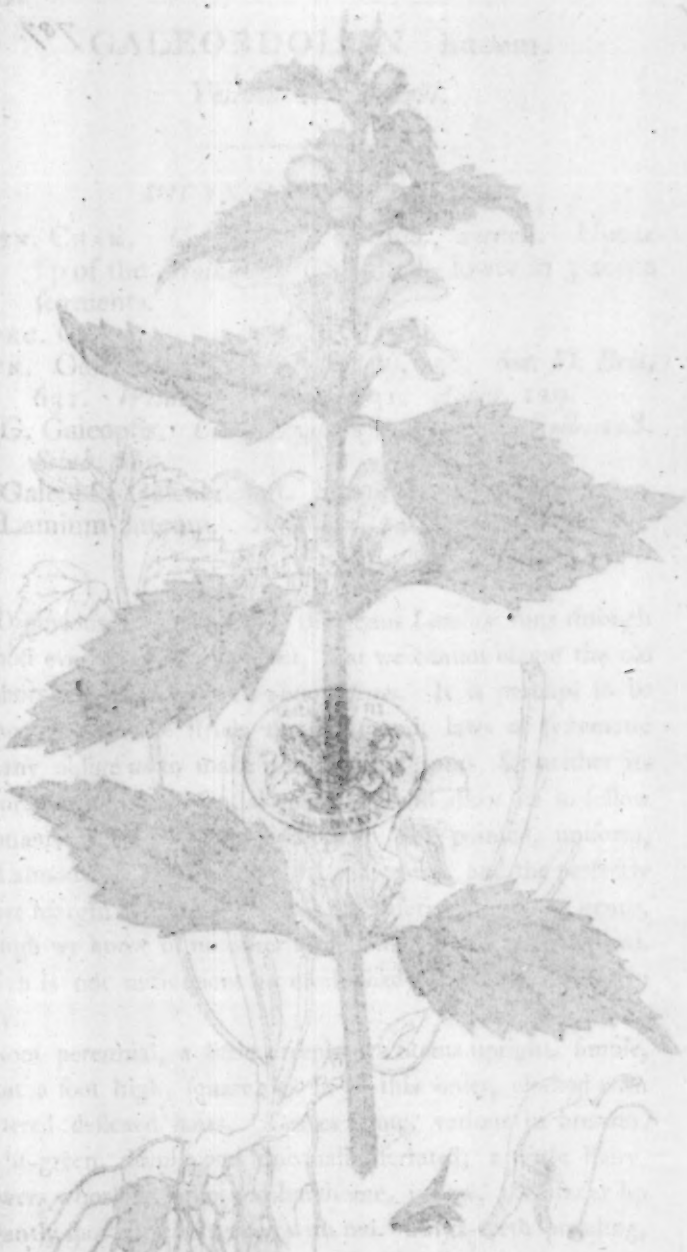
SPEC. CHAR. Receptacle oblong, brown. Leaves elliptic-lanceolate, entire, briſtle-pointed.

SYN. Splachnum mnioides. *Swartz. in Linn. fil. Meth. Muſc.* 26. *Dickſ. Crypt. faſc.* 1. 3. *With.* 793. *Hull.* 246.

Bryum ampullaceum, foliis et ampullis anguſtioribus. *Dill. Muſc.* 345. *t.* 44. *f.* 5.

SPECIMENS of this moſs were communicated to us from the mountains of Scotland by Mr. John Mackay in the month of July. It grows in denſe tufts, conſiſting of longiſh, ſimple or divided, leafy ſtems. The leaves are cloſely imbricated, lanceolate, approaching to an elliptical form (eſpecially the lower ones), entire, tipped with a long briſtly point, and having a not very conſpicuous rib. Fruit-ſtalks reddiſh-yellow, darkeſt at the ſummit. Receptacle a little inclined, oblong, or ſlender pear-ſhaped, brown, bearing a brown cylindrical capſule as in other ſpecies of this curious genus. The lid is flattiſh, with a blunt point; the teeth about 12.

We have aſcertained the above ſynonyms by actual compariſon of ſpecimens with the Linnæan and Dillenian collections, ſo that the doubts ſuggeſted by Dr. Withering are removed. The *Phaſcum pedunculatum* of Linnæus, and Hudſon's firſt edition, quoted by Dr. Swartz, is however a different plant, figured by Dillenius, *Hiſt. Muſc. t.* 44. *f.* 4. and *Raii Syn. t.* 3. *f.* 2, and named by Mr. Dickſon, in his ſecond *faſciculus*, *Splachnum ovatum*, having been miſtaken by the author of the *Flora Anglica* in his ſecond edition for S. *vaſculoſum* of Linnæus.



GALEOBDOLON luteum.

Yellow Archangel.

DIDYNAMIA Gymnoſpermia.

GEN. CHAR. *Cal.* 5-cleft, unequal, awned. Upper lip of the *corolla* entire, vaulted; lower in 3 acute ſegments.

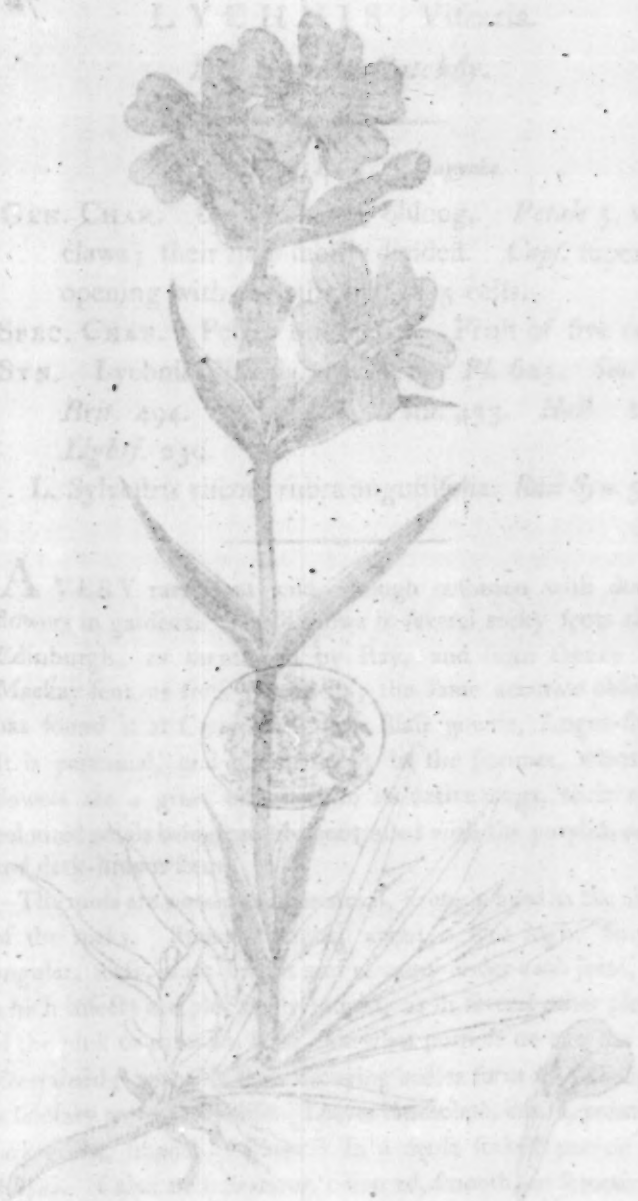
SPEC. CHAR. .....

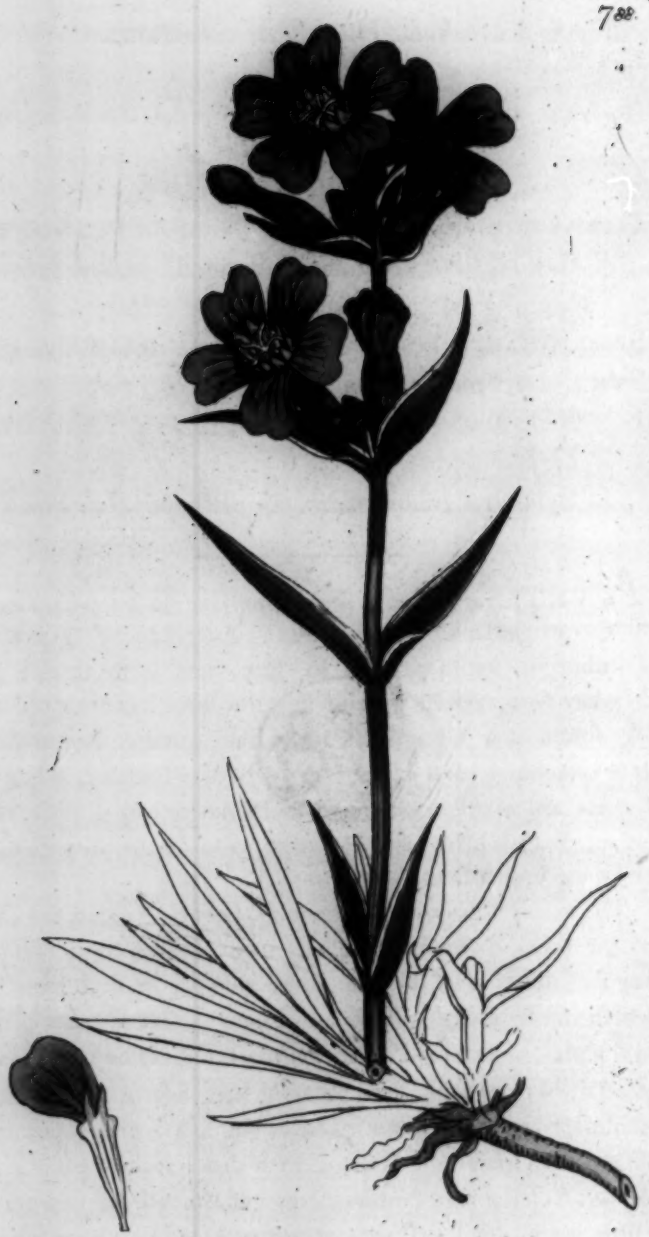
SYN. Galeobdolon luteum. *Hudſ.* 258. *Sm. Fl. Brit.* 631. *With.* 530. *Hull.* 131. *Abbot.* 129.
G. Galeopſis. *Curt. Lond. faſc.* 4. *t.* 40. *Relh.* 228. *Sibth.* 185.
Galeopſis Galeobdolon. *Linn. Sp. Pl.* 810.
Lamium luteum. *Raii Syn.* 240.

So obvious a reſemblance to the genus *Lamium* runs through almoſt every part of this plant, that we cannot blame the old authors for naming it *Lamium luteum.* It is perhaps to be lamented that the ſtrict, though ſound, laws of ſyſtematic botany oblige us to make it a ſeparate genus, for neither its natural habit nor eſſential characters will allow us to follow Linnæus in referring it to *Galeopſis.* The pointed, uniform, and almoſt equal, ſegments of the lower lip, and the perfectly entire margin of the upper, ſufficiently diſcriminate it as a genus, though we know of no other ſpecies than that here deſcribed, which is not unfrequent in moiſt ſhady groves, flowering in May.

Root perennial, a little creeping. Stems upright, ſimple, about a foot high, ſquare, as in all this order, clothed with ſcattered deflexed hairs. Leaves ovate, various in breadth, bright-green, deeply and unequally ſerrated, a little hairy. Flowers whorled, large and handſome, yellow, the under lip elegantly ſpotted and ſtreaked with red. Calyx-teeth ſpreading, each tipped with a ſmall briſtle. Bracteæ linear.

In ſenſible qualities this herb agrees with moſt ſpecies of *Lamium.* No particular virtues are attributed to it, nor does its place of growth render it troubleſome to the huſbandman.





LYCHNIS Viſcaria.

Red German Catchfly.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* of 1 leaf, oblong. *Petals* 5, with claws; their limb moſtly divided. *Capſ.* ſuperior, opening with 5 teeth, of 1 or 5 cells.

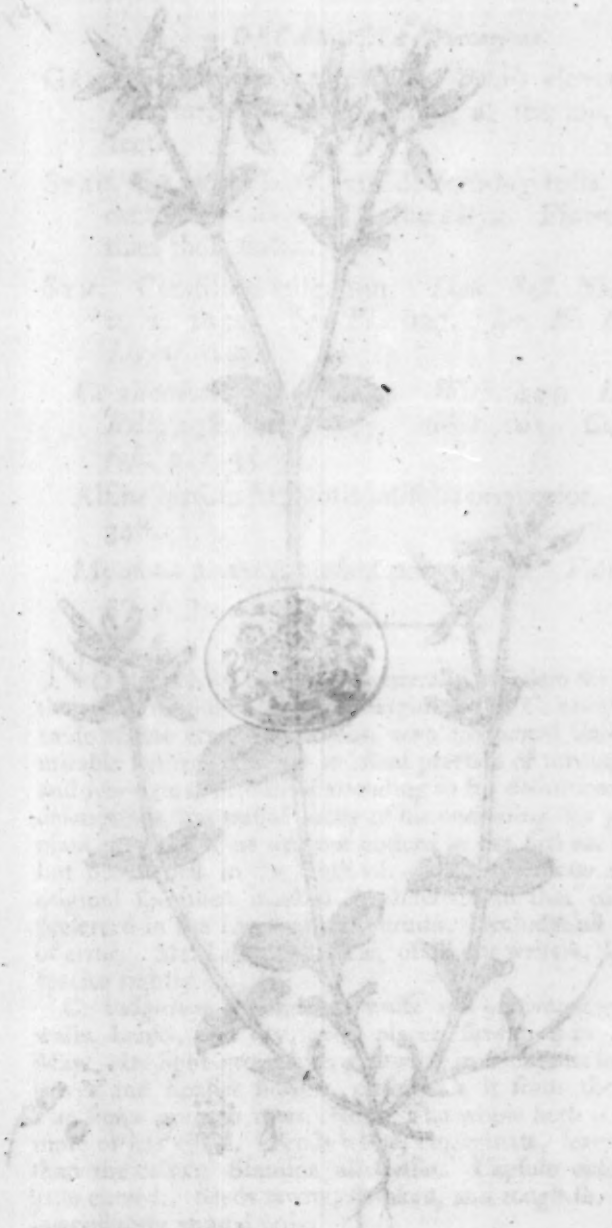
SPEC. CHAR. Petals undivided. Fruit of five cells.

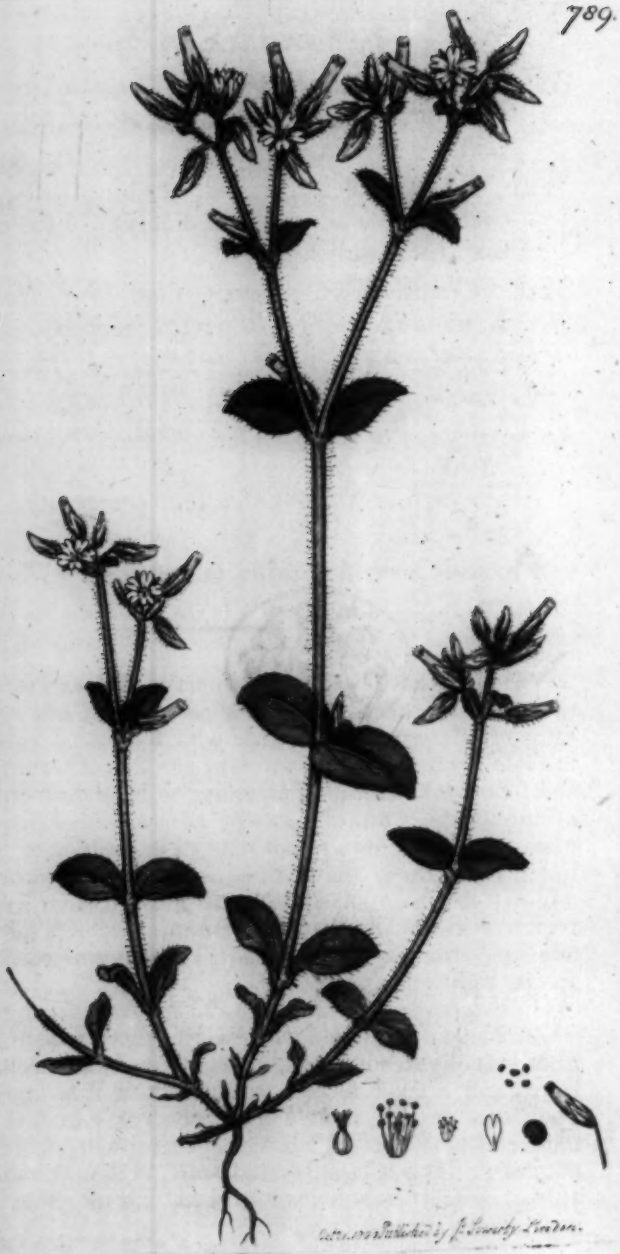
SYN. Lychnis Viſcaria. *Linn. Sp. Pl.* 625. *Sm. Fl. Brit.* 494. *Hudſ.* 199. *With.* 433. *Hull.* 100. *Lightf.* 239.

L. Sylveſtris viſcoſa rubra anguſtifolia. *Raii Syn.* 340.

A VERY rare plant wild, though common with double flowers in gardens. It ſtill grows in ſeveral rocky ſpots about Edinburgh, as mentioned by Ray, and from thence Mr. Mackay ſent us freſh ſpecimens; the ſame accurate obſerver has found it at Craig Hall, near Blair gowrie, Angus-ſhire. It is perennial, and blooms early in the ſummer, when its flowers are a great ornament to its native crags, their roſe-coloured petals being prettily contraſted with the purpliſh calyx and dark-brown ſtem.

The roots are woody and perennial, ſtrongly fixed in the clefts of the rocks. Stems ſtraight, about a foot high, ſimple, angular, leafy, dark-brown and clammy under each joint, by which inſects are plentifully caught, as in ſeveral other plants of the pink or campion tribe, for what purpoſe no one has yet aſcertained; probably their decaying bodies form an air which is ſalutary to vegetable life. Leaves lanceolate, entire, pointed, dark-green, ſmooth. Flowers in a denſe forked panicle or *thyrſus*. Calyx membranous, coloured, ſmooth, or ſometimes a little hairy. Petals ſlightly emarginate, with a cloven crown at the baſe of their limb. Capſule ovate, ſcarcely half ſo long as the calyx, divided internally into five cells, containing many rough ſeeds.





Published by J. Sowerby London.

CERASTIUM vulgatum.

Broad-leaved Mouſe-ear Chickweed.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* cloven. *Capſ.* ſuperior, of 1 cell, burſting at the top, with 10 teeth.

SPEC. CHAR. Hairy, viſcid, forming tufts. Leaves ovate. Petals equal to the calyx. Flowers longer than their ſtalks.

SYN. Ceraſtium vulgatum. *Linn. Syſt. Nat. ed.* 10. *v.* 2. 1039. *Sp. Pl.* 627. *Sm. Fl. Brit.* 496. *Lightf.* 240.

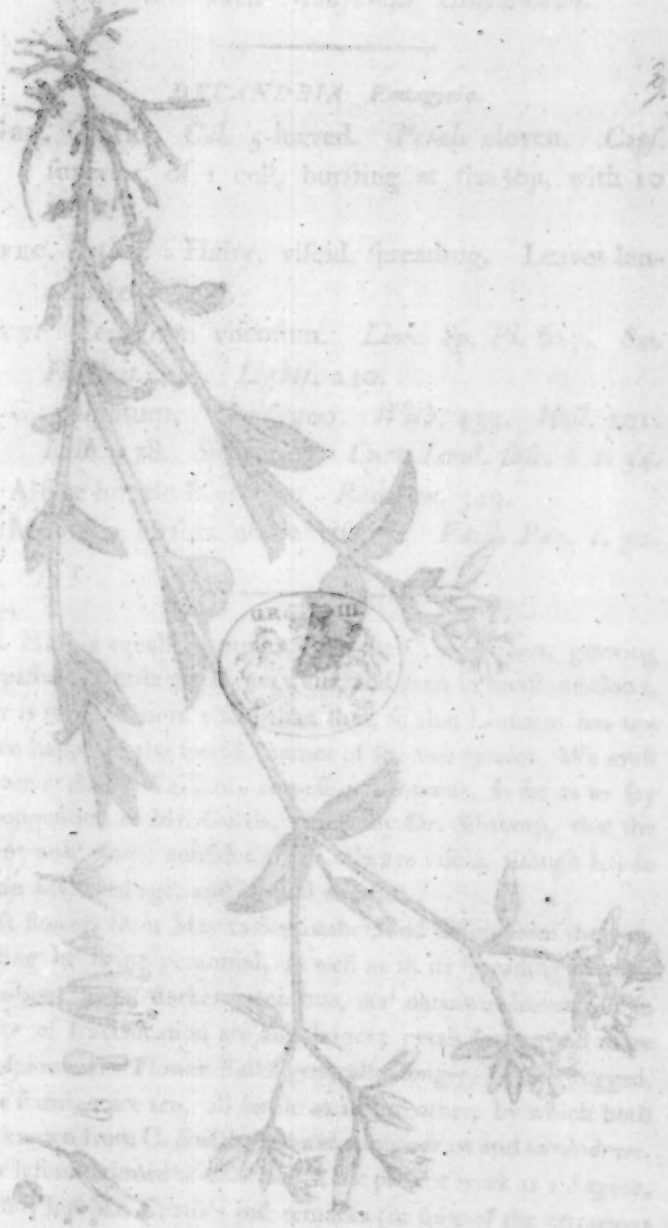
C. viſcoſum. *Hudſ.* 200. *With.* 433. *Hull.* 101. *Relh.* 178. *Sibth.* 147. *Abbot.* 101. *Curt. Lond. faſc.* 2. *t.* 35.

Alſine hirſuta Myoſotis latifolia præcocior. *Raii Syn.* 348.

Myoſotis arvenſis hirſuta parvo flore. *Vaill. Par. t.* 30. *f.* 3.

NO plants have been more generally miſtaken for each other than the common *Ceraſtium vulgatum* and *C. viſcoſum*. The cauſe of the error is Linnæus, who miſquoted Vaillant's admirable figures; and the indolent practice of turning to plates and ſynonyms, inſtead of attending to his definitions and ſolid deſcriptions, has miſled many of his compiling diſciples. The plant now before us was not noticed in the firſt ed. of *Sp. Pl.* but occurs firſt in the tenth ed. of *Syſtema Naturæ*, and the original ſpecimen marked A, referring to that edition, ſtill preſerved in the Linnæan herbarium, precludes all poſſibility of error. Mr. Lightfoot alone, of all our writers, knew theſe ſpecies rightly.

C. *vulgatum* abounds in waſte and cultivated ground, on walls, banks, and dry ſandy places, flowering in April and May. Its light-green hue, yelloviſh in decay, its broad ovate leaves and ſmaller flowers, diſtinguiſh it from the *viſcoſum*. The ſtems are alſo more erect. The whole herb is hairy and more or leſs viſcid. Petals white, emarginate, ſcarcely longer than the calyx. Stamina all fertile. Capſule cylindrical, a little curved. Seeds tawny, ſtreaked, and roughiſh. The root is conſtantly annual only.



Pl. 1000. Published by J. Sowerby London.

CERASTIUM viſcoſum.

Narrow-leaved Mouſe-ear Chickweed.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* cloven. *Capſ.* ſuperior, of 1 cell, burſting at the top, with 10 teeth.

SPEC. CHAR. Hairy, viſcid, ſpreading. Leaves lanceolate-oblong.

SYN. Ceraſtium viſcoſum. *Linn. Sp. Pl.* 627. *Sm. Fl. Brit.* 497. *Lightf.* 240.

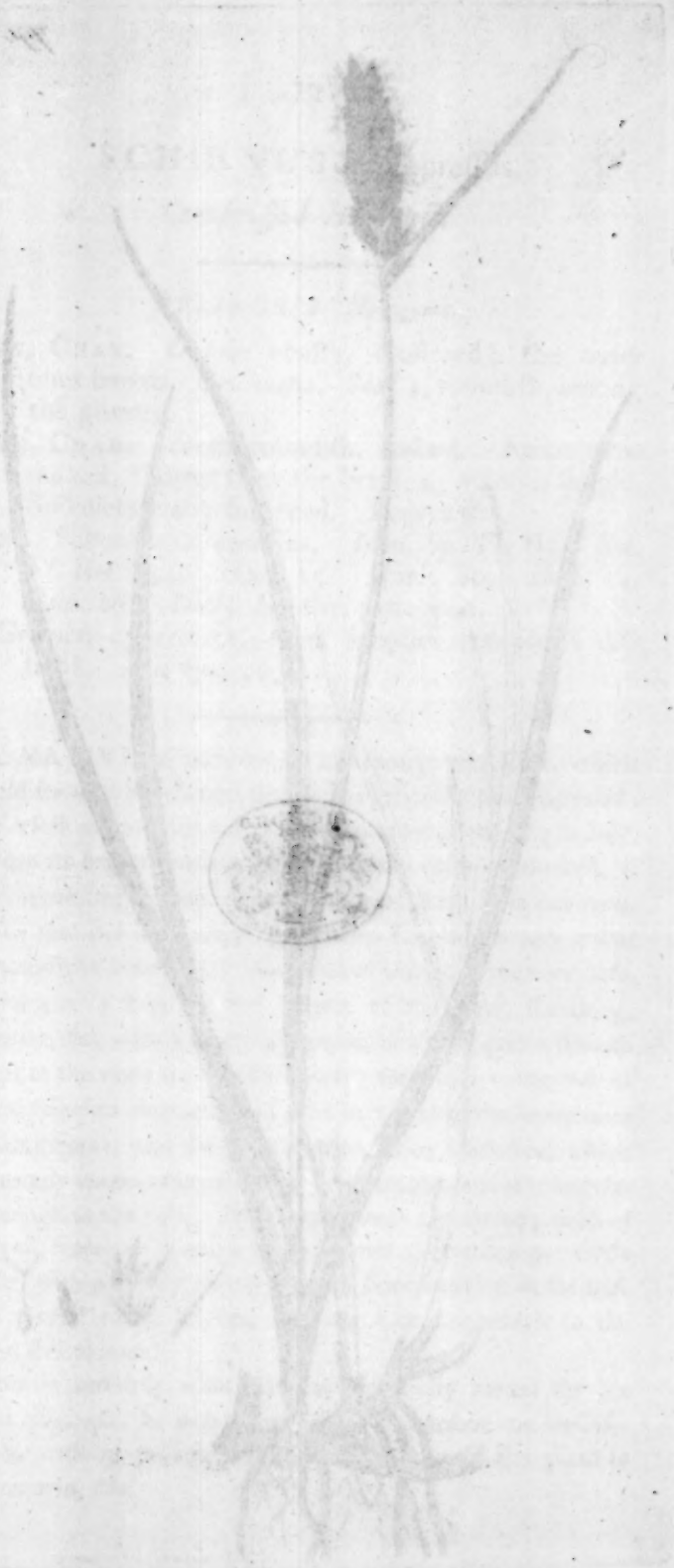
C. vulgatum. *Hudſ.* 200. *With.* 433. *Hull.* 101. *Relh.* 178. *Sibth.* 146. *Curt. Lond. faſc.* 2. *t.* 34.

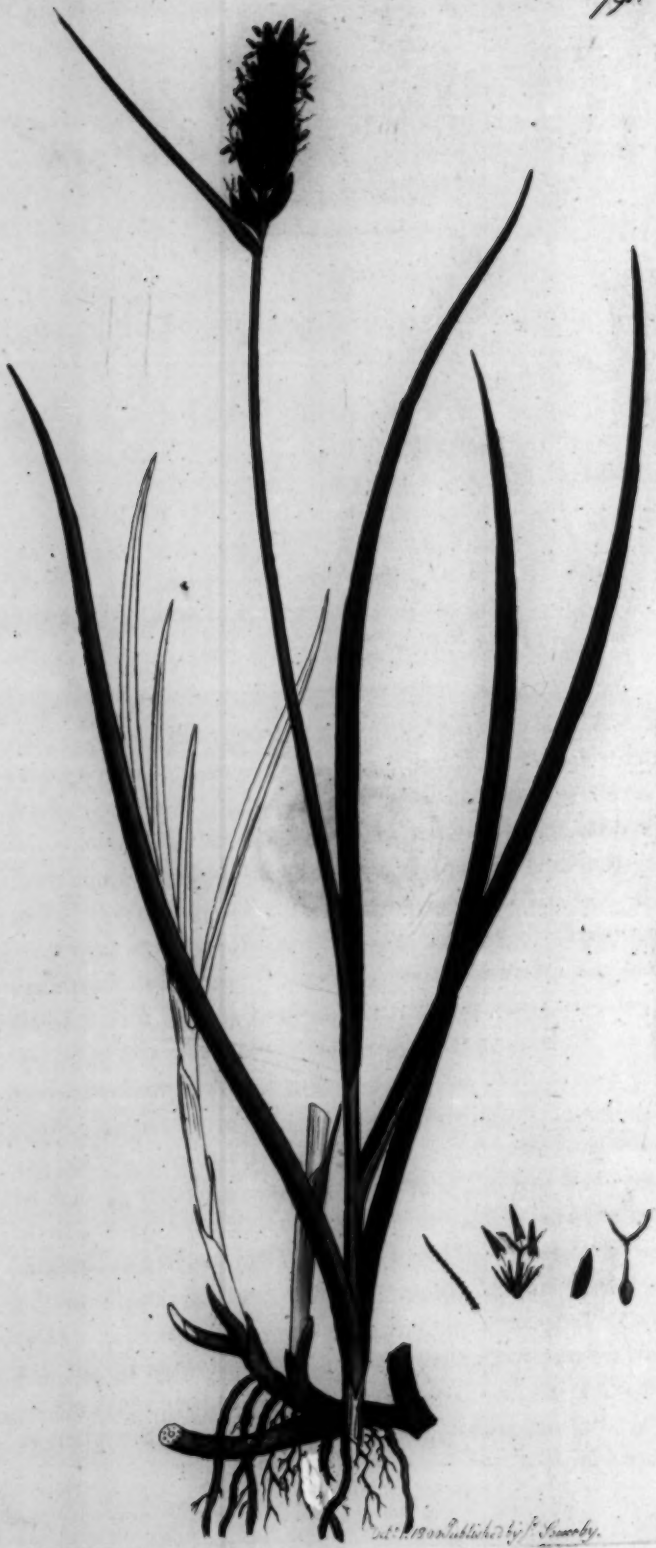
Alſine hirſuta Myoſotis. *Raii Syn.* 349.

Myoſotis hirſuta altera viſcoſa. *Vaill. Par. t.* 30. *f.* 1.

THIS is equally common with the C. *vulgatum*, growing in paſtures, waſte places, on walls, and even in moiſt meadows, nor is it at all more viſcid than that, ſo that Linnæus has not been happy in the ſpecific names of the two ſpecies. We muſt however defend Vaillant, as well as Linnæus, ſo far as to ſay in oppoſition to Mr. Curtis, copied by Dr. Sibthorp, that the plant now under conſideration is always viſcid, though leſs ſo at an advanced age, and in cold weather.

It flowers from May to September, and differs from the preceding in being perennial, as well as in its ſpreading or procumbent ſtems, darker green hue, and narrower leaves. The parts of fructification are alſo larger; petals longer and more conſpicuous. Flower-ſtalks generally longer. Seeds rugged. The ſtamina are ten, all fertile as in the other, by which both are known from C. *ſemidecandrum*, *pentandrum* and *tetrandrum*. The laſt mentioned is deſcribed in the preſent work as a *Sagina*, *t.* 166, but Mr. Curtis's juſt remarks (in ſpite of the erroneous criticiſms on my botanical phraſeology with which they are mixed) have led me to make it a *Ceraſtium* in the *Fl. Brit.*





del. Hibon Published by J. Sowerby.

SCHŒNUS compreſſus.

Compreſſed Bog-ruſh.

TRIANDRIA Monogynia.

GEN. CHAR. *Glumes* chaffy, cluſtered; the outer ones barren. *Cor.* none. *Seed* 1, roundiſh, among the glumes.

SPEC. CHAR. Stem roundiſh, naked. Spike two-ranked, ſhorter than the bractea, which is ſimple. Spikelets many-flowered. Leaves flat.

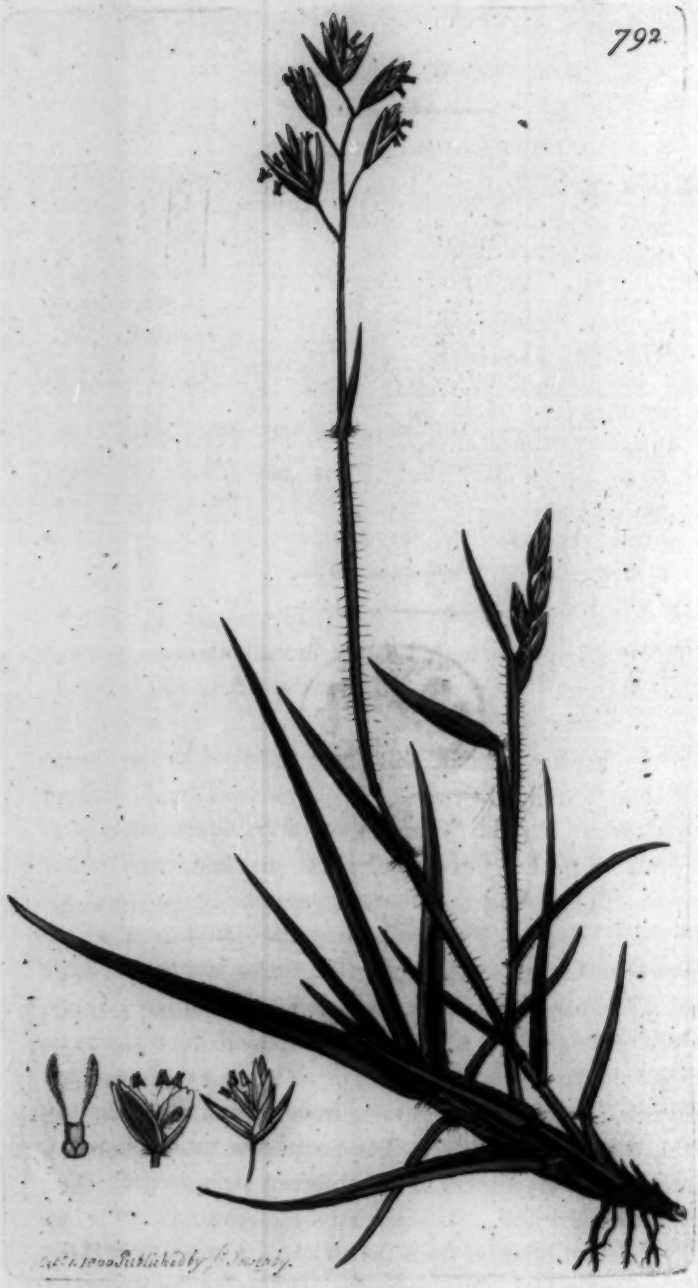
SYN. Schœnus compreſſus. *Linn. Sp. Pl.* 65. *Sm. Fl. Brit.* 44. *Hudſ.* 15. *With.* 80. *Hull.* 12. *Relh.* 17. *Dickſ. H. Sicc. faſc.* 3. 2.

Gramen cyperoides, ſpicâ ſimplici compreſsâ diſtichâ. *Raii Syn.* 425.

A NATIVE of turfy bogs, and ſpongy meadows, which ſhould ſeem to be leſs rare than it has generally been ſuppoſed; in Norfolk at leaſt it is not at all uncommon, flowering in July, nor are its bright-chefnut poliſhed ſpikes eaſily overlooked, if the ſurrounding herbage does not conceal them from our view.

The root is a little creeping. Stems ſimple, ſcarcely a foot high, upright, roundiſh, ſmooth, naked except at the very baſe. Leaves 3 or 4 inveſting the bottom of the ſtem, ſheathing, alternate, flat, with a projecting nerve, of a graſs green, ſmooth except at the margin. Spike ſolitary, terminal, compoſed of ſeveral ſpikelets alternately diſpoſed in 2 ranks, the lower ones a little remote, and the loweſt ſubtended by a bractea, which commonly exceeds the general ſpike in length, and is triangular and rough at the end. The outer glumes are barren; each of the reſt ſerves as a calyx to each floret. Stamina 3. Style ſimple, with a downy cloven ſtigma. Seed inveſted at the baſe with ſeveral rough briſtles, ſhowing a near approach to the genus *Eriophorum*.

This is certainly what Linnæus originally meant for his *Carex uliginoſa*, he having neglected to examine the fructification, truſting probably to the reſemblance of the plant to *C. arenaria*, &c.



Oct.1.1800. Published by J. Sowerby.

POA decumbens.

Decumbent Meadow-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, containing many florets. *Spikelet* rounded at the baſe. *Cor.* of 2 ovate, pointed, beardleſs valves.

SPEC. CHAR. Panicle generally ſimple, condenſed, erect. Spikelets ovate, four-flowered, the length of the calyx. Stipulæ formed of little hairs.

SYN. Poa decumbens. *With.* 147. *Sm. Fl. Brit.* 107. *Hull.* 23.

Feſtuca decumbens. *Linn. Sp. Pl.* 110. *Hudſ.* 47. *Relh.* 43. *Sibth.* 46. *Abbot.* 22. *Dickſ. H. Sicc. faſc.* 11. 3.

Gramen avenaceum parvum procumbens, paniculis non ariſtatis. *Raii Syn.* 408.

SPONGY bogs on barren ſandy or mountainous ground produce this graſs frequently. It flowers in July and is perennial.

The whole plant is remarkably harſh and rigid, lying cloſe to the ground, except when in flower. The roots creep, though to no great extent. The ſtem is about a foot long, jointed and bent, ſmooth, leafy. Leaves linear, ſtraight, horizontal, rather glaucous. Their long ſheaths cloſely inveſt the ſtem and are hairy (particularly upwards) and ſtriated. The ſtipula which crowns their ſummit withinſide is formed of numerous denſe hairs. The panicle is zigzag, and conſiſts of but few flowers. Each ſpikelet is ovate, acute, tumid (eſpecially as it ripens its ſeeds), ſmooth, generally purpliſh. The calyx glumes are about as long as the ſpikelet, nearly equal, ovate, acute, ſlightly ribbed, with a rough keel. The florets are more elliptical, blunter, and notched, very ſmooth, nerved, hairy at their baſe; their outer glume has in its notch a ſhort intermediate flat tooth, totally different however from the awn of a *Feſtuca*, ſo that we readily aſſent to Dr. Withering's alteration in making this graſs a *Poa*. In habit, and ſtructure of ſome parts, it is, as Linnæus obſerves, more allied to *Melica*.

G.R. III.

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